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Natural Gas Monthly
May 1999

Energy Information Administration
Office of Oil and Gas
U.S. Department of Energy
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Preface

The *Natural Gas Monthly (NGM)* is prepared in the Natural Gas Division, Office of Oil and Gas, Energy Information Administration (EIA), U.S. Department of Energy (DOE), under the direction of Joan E. Heinkel.

General questions and comments regarding the *NGM* may be referred to Ann M. Ducca (202) 586-6137. Specific technical questions may be referred to the appropriate persons listed in Appendix E.

The *NGM* highlights activities, events, and analyses of interest to public and private sector organizations associated with the natural gas industry. Volume and price data are presented each month for natural gas production, distribution, consumption, and interstate pipeline activities. Producer-related activities and underground storage data are also reported. From time to time, the *NGM* features articles designed to assist readers in using and interpreting natural gas information.

The data in this publication are collected on surveys conducted by the EIA to fulfill its responsibilities for gathering and reporting energy data. Some of the data are collected under the authority of the Federal Energy Regulatory Commission (FERC), an independent commission within the DOE, which has jurisdiction primarily in the regulation of electric utilities and the interstate natural gas industry. Geographic coverage is the 50 States and the District of Columbia.

Explanatory Notes supplement the information found in tables of the report. A description of the data collection surveys that support the *NGM* is provided in the Data Sources section. A glossary of the terms used in this report is also provided to assist readers in understanding the data presented in this publication.

All natural gas volumes are reported at a pressure base of 14.73 pounds per square inch absolute (psia) and at 60 degrees Fahrenheit. Cubic feet are converted to cubic meters by applying a factor of 0.02831685.

Common Abbreviations Used in the Natural Gas Monthly

AGA	American Gas Association	IOGCC	Interstate Oil and Gas Compact Commission
Bbl	Barrels	LNG	Liquefied Natural Gas
BLS	Bureau of Labor Statistics, U.S. Department of Labor	Mcf	Thousand Cubic Feet
Bcf	Billion Cubic Feet	MMBtu	Million British Thermal Units
BOM	Bureau of Mines, U.S. Department of the Interior	MMcf	Million Cubic Feet
Btu	British Thermal Unit	MMS	United States Minerals Management Service, U.S. Department of the Interior
DOE	U.S. Department of Energy	NGL	Natural Gas Liquids
DOI	U.S. Department of the Interior	OCS	Outer Continental Shelf
EIA	Energy Information Administration, U.S. Department of Energy	STIFS	Short-Term Integrated Forecasting System
FERC	Federal Energy Regulatory Commission	STEO	Short Term Energy Outlook
		Tcf	Trillion Cubic Feet

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Overview

This issue of the *Natural Gas Monthly* contains estimates through May 1999 for many natural gas data series at the national level. Estimates of natural gas prices are available through February 1999 for most series. Highlights of the most recent data contained in this issue are:

Dry natural gas production in May 1999, at 1,596 billion cubic feet, is nearly equal to that of May 1998. Cumulatively for the year, production is slightly lower (1 percent) than in 1998.

During the 1998-99 heating season, working gas in storage was generally 20 percent or more above the levels of the prior heating season. However, estimates for the end of May 1999 show working gas exceeding the 1998 level by only 3 percent.

Cumulative end-use natural gas consumption through May 1999 is estimated to be 3 percent higher than for the same period in 1998.

Average monthly natural gas wellhead prices have been below $2.00 per thousand cubic feet since August 1998. The most recent estimate is $1.73 per thousand cubic feet in February 1999.

Supply

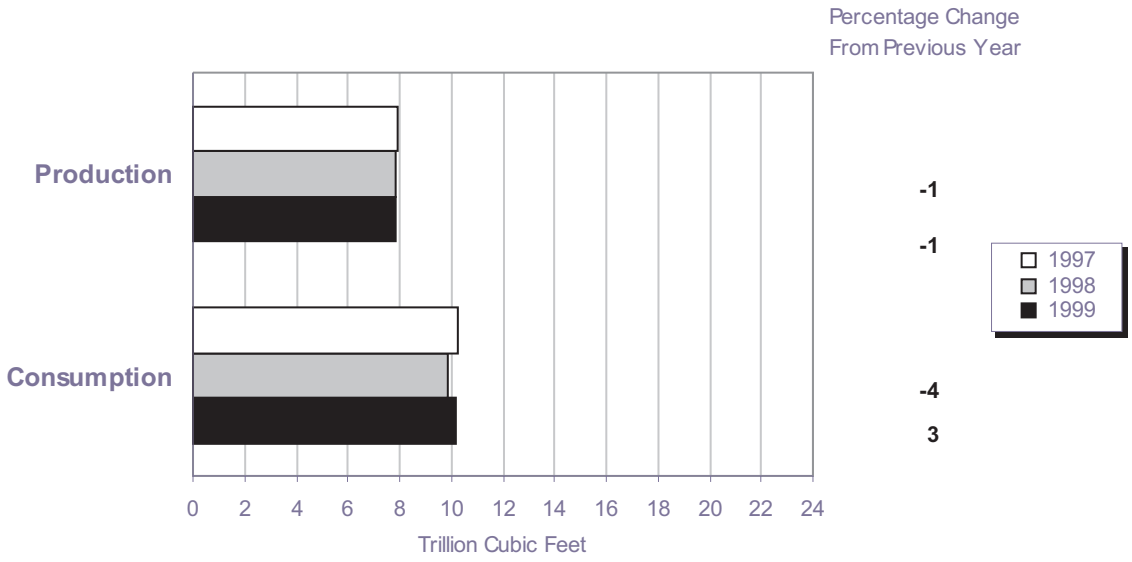
Natural gas supplies through May 1999 have been adequate to meet the slight increase seen in demand this year. Cumulative dry production is lower than during the same period of 1998, but by only 1 percent. Net imports have also increased, and storage levels at the end of May are somewhat higher than last year. Cumulatively through May 1999, dry natural gas production is estimated to be 54 billion cubic feet (1 percent) lower than during the same period in 1998 (Figure HI1). Production in May 1999 is estimated to be 1,596 billion cubic feet, nearly the same as the 1,600 billion cubic feet produced in May 1998 (Table 1).

Cumulative net imports of natural gas for January through May 1999 are estimated to be 98 billion cubic feet (8 percent) higher than in 1998 during the same period (Table 2). This increase in imports has occurred as additional pipeline capacity from Canada became available in the last quarter of 1998. Net imports during May 1999 are estimated to be 255 billion cubic feet, 15 billion cubic feet (6 percent) higher than in May 1998.

The amount of working gas in underground storage facilities as of March 31, 1999, the end of the 1998-99 heating season, is estimated to be 1,430 billion cubic feet (Figure HI2). This is the result not only of injections and withdrawals that occurred during the season, but also the reclassification of 47 billion cubic feet of working gas to base gas, which further reduced the working gas level.[1] Base gas (or cushion gas) is the amount of natural gas that is needed as a permanent inventory in a storage reservoir to maintain adequate pressure and deliverability. Working gas is the additional amount of gas that is added to base gas for storage purposes, to be withdrawn and consumed at a later time. The classification of gas as either base or working is an engineering decision based on the physical characteristics of each storage facility. These judgments may be adjusted over time. The March 1999 reclassification is a result of such an engineering evaluation by one company. Even with this reclassification, the estimate of working gas at the end of March 1999 is the highest end-of-March level since 1992. Estimated net injections during April and May 1999, the first 2 months

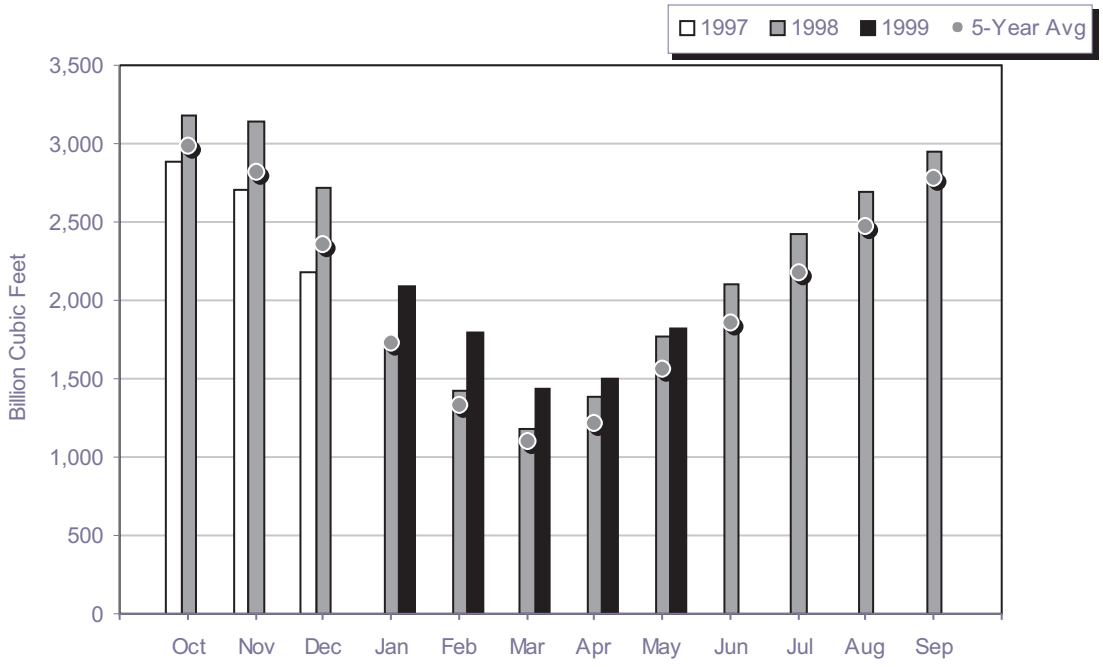
1 Energy Information Administration, *EIA Reports*. http://www.eia.doe.gov/neic/press/pressl29.html (May 26, 1999).

Figure HI1. Natural Gas Production and Consumption, January-May, 1997-1999



Source: Table 2.

Figure HI2. Working Gas in Underground Storage in the United States, 1997-1999



Note: The 5-year average is calculated using the latest available monthly data. For example, the December average is calculated from December storage levels for 1994 to 1998 while the January average is calculated from January levels for 1995 to 1999. Data are reported as of the end of the month, thus October data represent the beginning of the heating season.

Source: Form EIA-191, "Underground Natural Gas Storage Report," Form EIA-176, "Annual Report of Natural

of the refill season, are lower than a year ago. Thus, the estimate of working gas at the end of May 1999 is 1,825 billion cubic feet, 50 billion cubic feet (3 percent) higher than the 1998 level.

End-Use Consumption

Cumulative end-use consumption of natural gas through May 1999 is estimated to be 3 percent higher than during the same period last year (Table 3). The increase is largely the result of cooler temperatures, as measured by heating degree days, in the early months of 1999 compared with 1998.[2] Cumulatively, residential consumption of natural gas through May 1999 is estimated to be 132 billion cubic feet (5 percent) higher than for the same period of 1998 (Figure HI3). In January alone, residential consumption was 102 billion cubic feet higher than in January 1998. Nationally, even though January 1999 was 8 percent warmer than normal, it was 15 percent colder than January 1998. The East North Central and Middle Atlantic Census Divisions were 23 percent colder in January 1999 than in January 1998. Residential users in these two areas tend to consume more natural gas than those in other parts of the country. Most recently, U.S. residential consumption for May 1999 is estimated to be 233 billion cubic feet, 12 billion cubic feet (5 percent) higher than in May 1998.

In the commercial sector, natural gas consumption for January through May 1999 is estimated to be 92 billion cubic feet (6 percent) higher than for the same period in 1998. As in the residential sector, commercial consumption is driven by the demand for space heating, and in January 1999 it was higher than in January 1998—32 billion cubic feet (7 percent) higher. Commercial consumption in May 1999 is estimated to be 201 billion cubic feet, which is 14 percent higher than in May 1998.

Cumulative industrial consumption of natural gas is slightly below that of last year. Through May 1999, estimates show that the industrial sector has consumed 42 billion cubic feet (1 percent) less than during the same period in 1998. In May 1999, the industrial sector consumed 682 billion cubic feet of natural gas, 10 billion cubic feet (1 percent) more than in May 1998.

Estimates for electric utility consumption of natural gas are available through February 1999. Electric utilities have consumed 26 billion cubic feet (9 percent) more during the first 2 months of 1999 than in 1998. During February 1999, consumption is estimated to be 152 billion cubic feet, which is 13 percent higher than in February 1998. These large increases have occurred even as the numbers of power plants operated by electric utilities have declined. Electric utilities are regulated entities. With the restructuring of the electricity industry, some electric utilities have sold power plants which then become nonutility electric generation facilities with a nonregulated status. Natural gas consumption by nonutility generators is included in the industrial sector, not the electric utility sector.

Prices

The most recent natural gas wellhead price estimate is $1.73 per thousand cubic feet for February 1999 (Table 4). This is somewhat lower than the January 1999 average of $1.80 and is 14 percent lower than the price in February 1998 (also see Figure HI4). The highest wellhead price estimated during the 1998-99 heating season was $1.94 per thousand cubic feet in November 1998. Daily spot and futures prices have exhibited a similar pattern during the November through February period (Figure HI5). The daily average spot price and the futures settlement price on the nearby month contract, both at the Henry Hub, were generally above $2.00 per million Btu[3] in November and generally below $2.00 per million Btu from December 1998 through March 1999. The spot and futures prices did not reach $2.00 again until the last day of March 1999.

The prices paid for natural gas in the end-use sectors in early 1999 are also estimated to be lower than last year at the same time. The average residential and

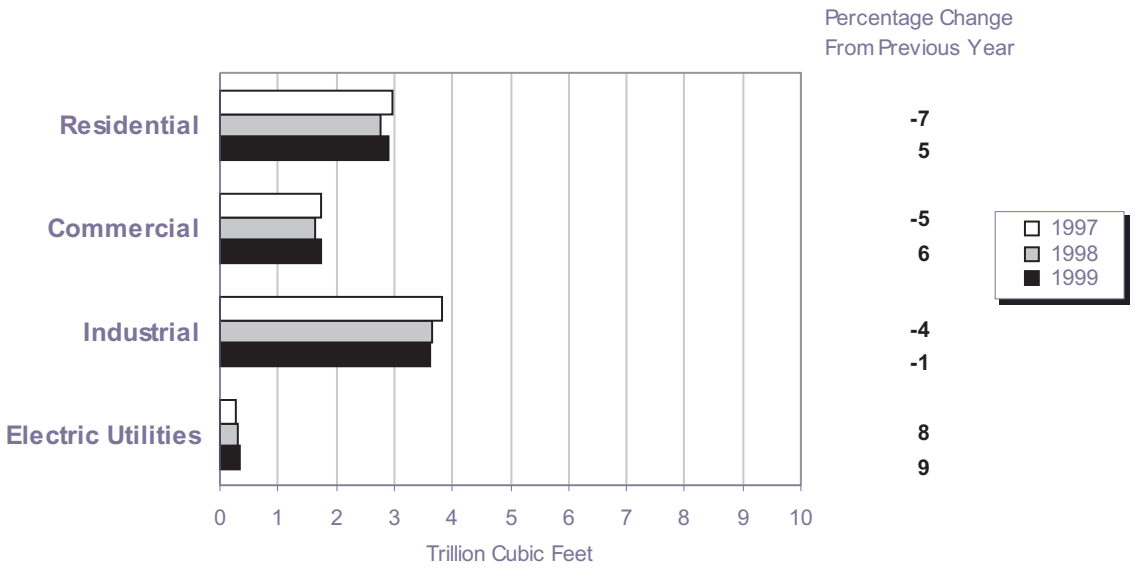
2 Heating degree days for the 1998-99 heating season are in the previous issue of this report: Energy Information Administration, *Natural Gas Monthly*, DOE/EIA-0130(99/04) (Washington, DC, May 1999), Table 26.

3 Prices in dollars per million Btu are roughly equivalent to prices in dollars per thousand cubic feet. Taking the price in dollars per million Btu and dividing by 1.03 will convert it to dollars per thousand cubic feet.

commercial prices[4] in February 1999 are estimated to be $6.24 and $5.18 per thousand cubic feet, respectively, 3 and 7 percent lower than in February 1998. In the industrial sector, the estimated price paid for natural gas in February 1999 is $2.99 per thousand cubic feet, 15 percent lower than a year ago. For the electric utility sector, the most recent price estimate is for January 1999, which at $2.26 per thousand cubic feet is 14 percent below that of January 1998.

More recent spot and futures prices at the Henry Hub during April and May 1999 have been above $2.00 per million Btu almost every day. During April, the futures settlement price climbed to $2.30 per million Btu and has been in the range of $2.20 to $2.35 for much of May 1999 (data are through May 21).

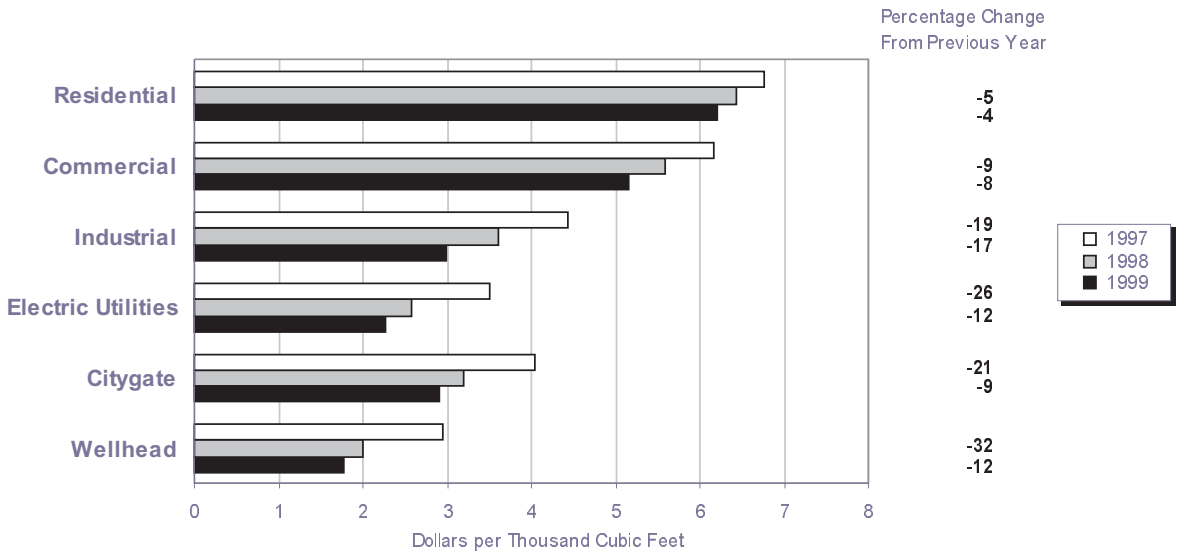
Figure HI3. Natural Gas Delivered to Consumers, January-May, 1997-1999



Note: Electric utilities reflect January-February deliveries.
Source: Table 3.

4 End-use prices in the residential, commercial, and industrial sectors are for onsystem gas sales only. While monthly onsystem sales are nearly 100 percent of residential deliveries, in 1998 they averaged 64 percent of commercial deliveries and only 15 percent of industrial deliveries (Table 4).

Figure HI4. Average Delivered and Wellhead Natural Gas Prices, January-February, 1997-1999



Note: Commercial and industrial average prices reflect onsystem sales only. The reporting of electric utility prices is 1 month behind the reporting of other prices.
Source: Table 4.

Figure HI5. Daily Futures Settlement Prices at the Henry Hub

Note: The future price is for the nearby month contract, that is, for the next contract to terminate trading. Contracts are traded on the New York Mercantile Exchange. April 1is the beginning of the natural gas storage refill season. November 1 is the beginning of the heating season.
Source: Commodity Futures Trading Commission, Division of Economic Analysis.

Table 1. Summary of Natural Gas Production in the United States, 1993-1999

(Billion Cubic Feet)

Year and Month	Gross Withdrawals	Repressuring	Nonhydrocarbon Gases Removed[a]	Vented and Flared	Marketed Production (Wet)	Extraction Loss[b]	Dry Gas Production[c]
1993 Total	**22,726**	**3,103**	**414**	**227**	**18,982**	**886**	**18,095**
1994 Total	**23,581**	**3,231**	**412**	**228**	**19,710**	**889**	**18,821**
1995 Total	**23,744**	**3,565**	**388**	**284**	**19,506**	**908**	**18,599**
1996 Total	**24,052**	**3,510**	**518**	**272**	**19,751**	**958**	**18,793**
1997							
January	2,089	305	50	25	1,709	83	1,626
February	1,905	289	46	22	1,549	75	1,474
March	2,103	311	51	23	1,720	83	1,636
April	1,993	285	48	22	1,639	80	1,559
May	2,041	268	50	22	1,702	83	1,619
June	1,952	275	47	18	1,612	78	1,534
July	2,020	272	51	23	1,674	81	1,593
August	2,022	279	52	21	1,671	81	1,590
September	1,988	285	50	21	1,632	79	1,553
October	2,057	307	51	20	1,678	81	1,597
November	1,999	302	52	19	1,626	79	1,547
December	2,044	314	52	22	1,655	80	1,575
Total	**24,213**	**3,492**	**599**	**256**	**19,866**	**964**	**18,902**
1998							
January	RE2,116	E332	E46	E22	RE1,717	E83	E1,633
February	E1,901	E294	E42	E18	E1,547	E75	E1,472
March	E2,083	E321	E45	E21	E1,696	E82	E1,613
April	RE2,003	E306	E44	E21	RE1,632	E79	RE1,553
May	RE2,063	E318	E43	E20	RE1,682	E82	RE1,600
June	E1,998	E294	E44	E22	E1,637	E79	E1,558
July	E2,028	E295	E45	E24	E1,665	E81	E1,584
August	E2,042	E292	E46	E24	E1,681	E82	E1,600
September	RE2,012	E314	E44	E23	RE1,631	E79	RE1,552
October	RE2,094	E351	E44	E23	RE1,677	E81	RE1,595
November	RE2,022	E339	E45	E24	RE1,615	E78	RE1,536
December	RE2,103	RE361	RE44	RE23	RE1,674	RE81	RE1,593
Total	**RE24,464**	**RE3,816**	**RE532**	**RE263**	**RE19,853**	**RE963**	**RE18,890**
1999							
January	RE2,059	RE330	RE44	RE23	RE1,663	RE81	RE1,582
February	RE1,935	RE310	RE41	RE21	E1,563	E76	E1,487
March	E2,089	E335	E44	E23	E1,687	E82	E1,605
April(STIFS)	NA	NA	NA	NA	E1,625	E79	E1,546
May(STIFS)	NA	NA	NA	NA	E1,678	E81	E1,596
1999 YTD	NA	NA	NA	NA	**E8,216**	**E398**	**E7,818**
1998 YTD	**E10,165**	**E1,571**	**E220**	**E102**	**E8,273**	**E401**	**E7,872**
1997 YTD	**10,132**	**1,457**	**245**	**112**	**8,318**	**404**	**7,915**

[a] See Appendix A, Explanatory Note 1, for a discussion of data on Nonhydrocarbon Gases Removed.

[b] Extraction loss is only collected on an annual basis. Annually it is between 4 and 5 percent of marketed production. Monthly extraction loss is estimated from monthly marketed production by assuming that the preceding annual percentage remains constant for the next twelve months.

[c] Equal to marketed production (wet) minus extraction loss.

E Estimated Data.

RE Revised Estimated Data.

NA Not Available.

Notes: Data for 1993 through 1997 are final. All other data are preliminary unless otherwise indicated and contain estimates for selected States (see Table 7). Estimates for the most recent two months are derived from the Short-Term Integrated Forecasting System (STIFS). Geographic coverage is the 50 States and the District of Columbia. Totals may not equal sum of components because of independent rounding.

Sources: 1993-1997: Energy Information Administration (EIA), *Natural Gas Annual 1997.* January 1998 through current month: Form EIA-895, "Monthly Quantity of Natural Gas Report," STIFS, and EIA estimates. See Appendix A, Explanatory Notes 1, 3, and 6, for discussion of computation and estimation procedures and revision policies.

Table 2

Table 2. Supply and Disposition of Dry Natural Gas in the United States, 1993-1999

(Billion Cubic Feet)

Year and Month	Dry Gas Production	Supplemental Gaseous Fuels[a]	Net Imports	Net Storage Withdrawals[b]	Balancing Item[c]	Consumption[d]
1993 Total	**18,095**	**119**	**2,210**	**-36**	**-110**	**20,279**
1994 Total	**18,821**	**111**	**2,462**	**-286**	**-400**	**20,708**
1995 Total	**18,599**	**110**	**2,687**	**415**	**-230**	**21,581**
1996 Total	**18,793**	**109**	**2,784**	**2**	**279**	**21,967**
1997						
January	1,626	12	266	709	-90	2,523
February	1,474	10	228	371	170	2,253
March	1,636	9	241	160	69	2,115
April	1,559	8	224	-61	64	1,795
May	1,619	8	232	-333	62	1,588
June	1,534	6	223	-379	67	1,451
July	1,593	7	225	-293	5	1,537
August	1,590	8	227	-334	28	1,518
September	1,553	6	226	-349	3	1,440
October	1,597	8	239	-218	-92	1,534
November	1,547	10	259	196	-116	1,895
December	1,575	11	246	553	-68	2,317
Total	**18,902**	**103**	**2,837**	**24**	**106**	**21,972**
1998						
January	E1,633	E12	267	466	R32	2,410
February	E1,472	E10	237	300	91	2,109
March	E1,613	E11	244	242	R21	R2,132
April	RE1,553	E9	235	-199	R119	1,718
May	RE1,600	E8	240	-393	R61	1,517
June	E1,558	E7	236	-323	-1	1,477
July	E1,584	E9	251	-314	53	1,583
August	E1,600	E9	244	-283	9	1,577
September	RE1,552	E9	255	-227	R-123	1,467
October	RE1,595	E10	257	-255	R-122	1,484
November	RE1,536	E11	243	34	R-114	1,711
December	RE1,593	E12	267	435	R-166	R2,141
Total	**RE18,890**	**E117**	**2,977**	**-518**	**R-140**	**R21,326**
1999						
January	RE1,582	E13	RE293	623	R13	RE2,524
February	E1,487	E11	RE260	333	R18	2,109
March	E1,605	E11	E263	297	E-32	E2,143
April(STIFS)	E1,546	E10	E250	RE-70	RE55	E1,791
May(STIFS)	E1,596	E9	E255	E-325	E38	E1,574
1999 YTD	**E7,818**	**E53**	**E1,321**	**E857**	**E92**	**E10,141**
1998 YTD	**E7,872**	**E50**	**1,223**	**416**	**325**	**9,885**
1997 YTD	**7,915**	**47**	**1,191**	**847**	**274**	**10,275**

[a] Supplemental gaseous fuels data are only collected on an annual basis except for the Dakota Gasification Inc. coal gasification facility which provides data each month. The ratio of annual supplemental fuels (excluding Dakota Gasification Inc.) to the sum of dry gas production, net imports, and net withdrawals from storage is calculated. This ratio, which varies between .0025 and .0037, is applied to the monthly sum of these three elements. The Dakota Gasification Inc. monthly value is added to the result to produce the monthly supplemental fuels estimate.

[b] Monthly and annual data for 1992 through 1997 include underground storage and liquefied natural gas storage. Data for January 1998 forward include underground storage only. See Appendix A, Explanatory Note 7 for discussion of computation procedures.

[c] Represents quantities lost and imbalances in data due to differences among data sources. See Appendix A, Explanatory Note 9, for full discussion.

[d] Consists of pipeline fuel use, lease and plant fuel use, vehicle fuel, and deliveries to consuming sectors as shown in Table 3.

[R] Revised Data.

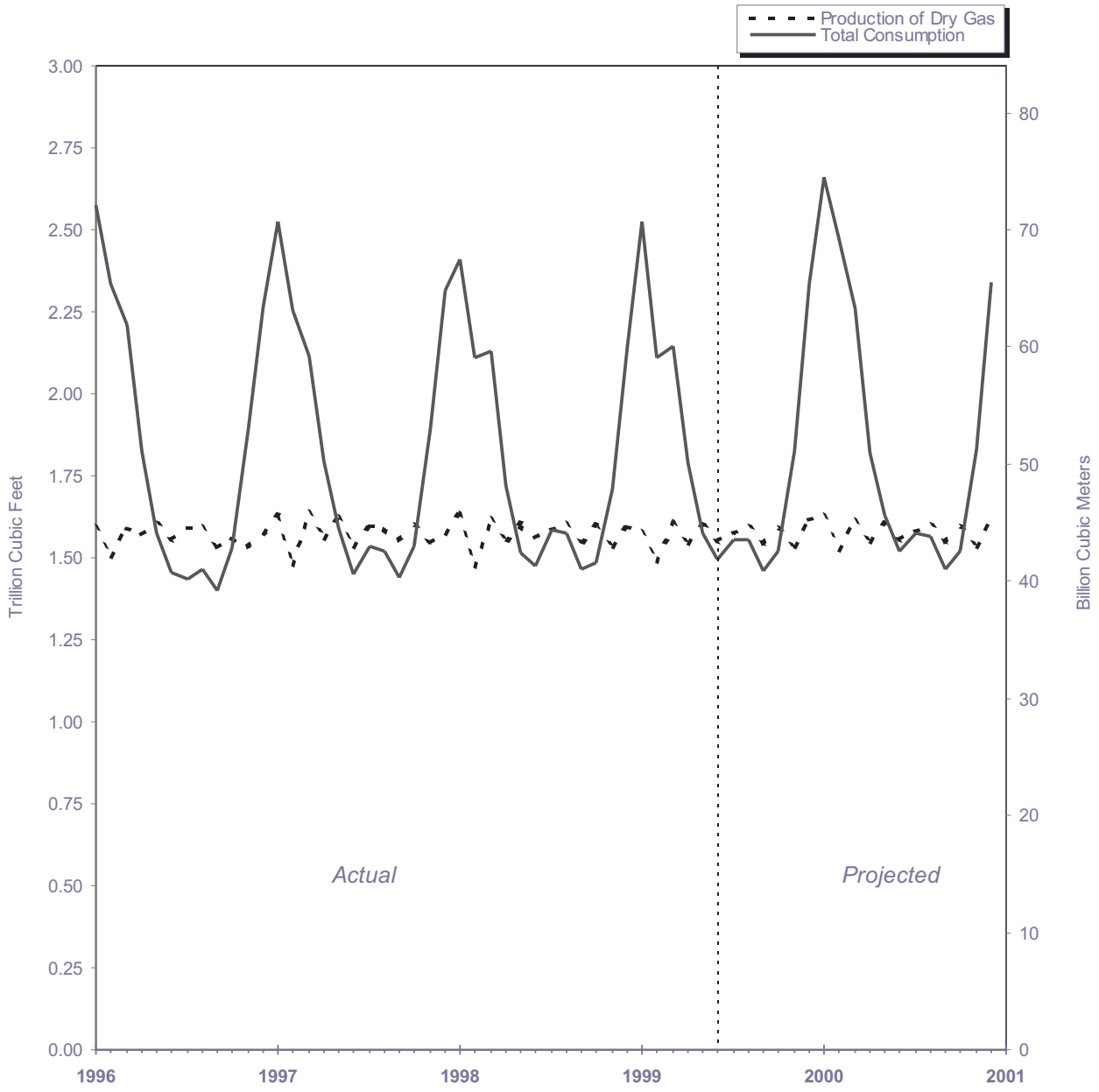
[E] Estimated Data.

[RE] Revised Estimated Data.

Notes: Data for 1993 through 1997 are final. All other data are preliminary unless otherwise indicated. Estimates for the most recent two months are derived from the Short-Term Integrated Forecasting System (STIFS). Geographic coverage is the 50 States and the District of Columbia. Totals may not equal sum of components because of independent rounding.

Sources: 1993-1997: Energy Information Administration (EIA), *Natural Gas Annual 1997*. 1997: EIA-895, "Monthly Quantity of Natural Gas Report," Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers," Form EIA-191, " Monthly Underground Gas Storage Report," and Office of Fossil Energy, U.S. Department of Energy, Natural Gas Imports and Exports and EIA computations. January 1998 through current month: EIA, Form EIA-895, Form EIA-857, Form EIA-191, EIA computations, and estimates, Short-Term Integrated Forecasting System (STIFS) computations, and Office of Fossil Energy, Natural Gas Imports and Exports. See Appendix A for discussion of computation and estimation procedures and revision policies.

Figure 1. Production and Consumption of Natural Gas in the United States, 1996-2000



Sources: 1996 through the current month: Table 2. Projected data: Energy Information Administration, *Short-Term Energy Outlook (January 1999)*

Table 3

Table 3. Natural Gas Consumption in the United States, 1993-1999

(Billion Cubic Feet)

Year and Month	Lease and Plant Fuel[a]	Pipeline Fuel[b]	Delivered to Consumers					Total Consumption
			Residential	Commercial	Industrial	Electric Utilities	Total	
1993 Total	**1,172**	**624**	**4,956**	**[c]2,863**	**7,981**	**2,682**	**18,483**	**20,279**
1994 Total	**1,124**	**685**	**4,848**	**[c]2,897**	**8,167**	**2,987**	**18,899**	**20,708**
1995 Total	**1,220**	**700**	**4,850**	**[c]3,034**	**8,580**	**3,197**	**19,660**	**21,581**
1996 Total	**1,250**	**711**	**5,241**	**[c]3,161**	**8,870**	**2,732**	**20,006**	**21,967**
1997								
January	104	88	902	475	816	139	2,332	2,523
February	94	78	757	421	759	143	2,081	2,253
March	104	73	606	360	782	190	1,938	2,115
April	99	61	433	270	739	193	1,635	1,795
May	102	54	284	204	713	232	1,432	1,588
June	97	49	164	154	690	297	1,305	1,451
July	101	52	128	144	683	429	1,385	1,537
August	101	51	118	140	717	391	1,366	1,518
September	99	49	129	142	689	333	1,293	1,440
October	102	52	234	190	711	244	1,380	1,534
November	99	65	497	306	748	180	1,731	1,895
December	101	81	731	411	796	197	2,135	2,317
Total	**1,202**	**752**	**4,984**	**3,223**	**8,843**	**2,968**	**20,018**	**21,972**
1998								
January	[E]107	82	806	449	794	171	2,220	2,410
February	[E]97	72	685	392	730	134	1,940	2,109
March	[E]106	73	641	371	746	194	1,952	[R]2,132
April	[E]102	59	408	257	702	190	1,557	1,718
May	[RE]105	52	221	177	672	290	1,359	1,517
June	[E]103	51	153	144	649	379	1,324	1,477
July	[E]104	54	130	154	691	449	1,424	1,583
August	[E]105	54	115	152	694	457	1,418	1,577
September	[E]102	50	120	148	666	381	1,314	1,467
October	[E]105	51	200	178	704	246	1,328	1,484
November	[E]101	59	390	263	722	178	1,551	1,711
December	[RE]105	73	613	370	792	189	1,963	[R]2,141
Total	**[RE]1,243**	**[R]729**	**4,482**	**3,053**	**8,561**	**3,258**	**19,354**	**[R]21,326**
1999								
January	[RE]104	86	908	481	767	179	2,334	[RE]2,524
February	[E]98	72	673	394	720	152	1,939	2,109
March(STIFS)	[E]105	[E]70	[E]650	[E]382	[E]731	[NA]	[E]1,968	[E]2,143
April(STIFS)	[E]101	[E]55	[E]428	[E]281	[E]702	[NA]	[E]1,635	[E]1,791
May(STIFS)	[E]104	[E]50	[E]233	[E]201	[E]682	[NA]	[E]1,419	[E]1,574
1999 YTD[d]	**[E]512**	**[E]334**	**[E]2,892**	**[E]1,738**	**[E]3,602**	**331**	**[E]9,295**	**[E]10,141**
1998 YTD[d]	**[E]518**	**338**	**2,760**	**1,646**	**3,644**	**305**	**9,029**	**9,885**
1997 YTD[d]	**503**	**353**	**2,983**	**1,730**	**3,808**	**282**	**9,418**	**10,275**

[a] Plant fuel data are only collected on an annual basis and monthly lease fuel data are only collected annually. Lease and plant fuel estimates have been between 6 and 7 percent of marketed production annually. Monthly lease and plant fuel use is estimated from monthly marketed production by assuming that the preceding annual percentage remains constant for the next twelve months.

[b] Pipeline fuel use is only collected on an annual basis. Annually it is between 3 and 4 percent of total consumption. Monthly pipeline fuel data are estimated from monthly total consumption(excluding pipeline fuel) by assuming that the preceding annual percentage remains constant for the next twelve months.

[c] Vehicle fuel deliveries, in billion cubic feet, were 0.4 in 1991, 0.5 in 1992, 1.0 in 1993, 1.7 in 1994, 2.7 in 1995, 2.9 in 1996 and 4.4 in 1997.

[d] Year-to-date volume represents months for which volume information is available in the current year.

[R] Revised Data.

[E] Estimated Data.

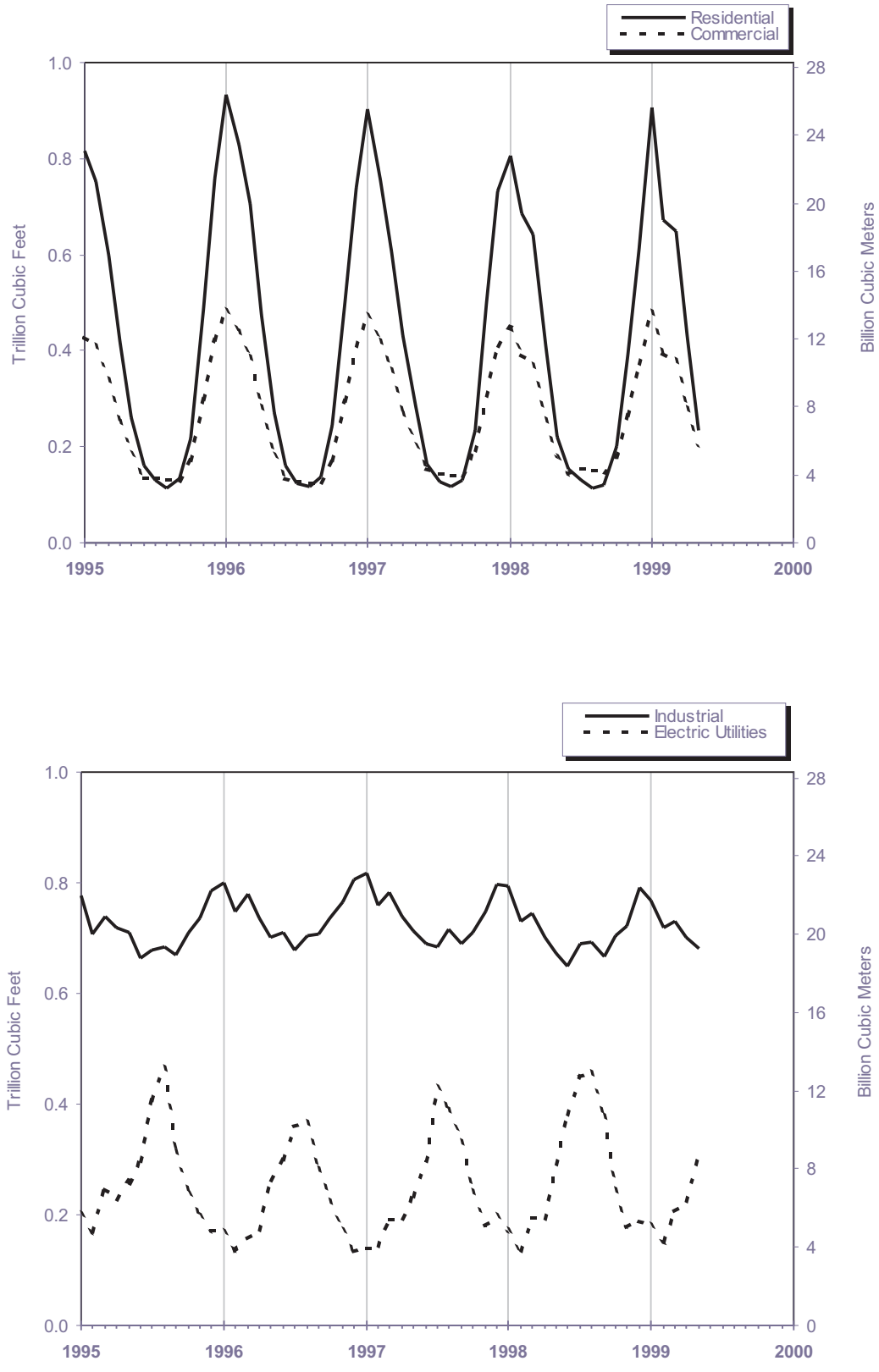
[RE] Revised Estimated Data.

[NA] Not Available.

Notes: Data for 1993 through 1997 are final. All other data are preliminary unless otherwise indicated. Estimates for the most recent three months are derived from the Short-Term Integrated Forecasting System (STIFS). Geographic coverage is the 50 States and the District of Columbia. Totals may not equal sum of components because of independent rounding. In 1996, consumption of natural gas for agricultural use is classified' as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use. See Explanatory Note 5 for further explanation.

Sources: 1993-1997: Energy Information Administration (EIA): Form EIA-627, "Annual Quantity and Value of Natural Gas Report," (thru 1994), Form EIA-895 "Monthly Quantity of Natural Gas Report," (1995 forward), Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers," Form EIA-759, "Monthly Power Plant Report," EIA computations, and *Natural Gas Annual 1997*. January 1998 through the current month: EIA: Form EIA-895, Form EIA-857, Form EIA-759, and STIFS computations. See Appendix A, Explanatory Note 5, for computation procedures and revision policy.

Figure 2. Natural Gas Deliveries to Consumers in the United States, 1995-1999



Sources: Table 3.

Table 4

Table 4. Selected National Average Natural Gas Prices, 1993-1999

(Dollars per Thousand Cubic Feet)

Year and Month	Wellhead Price[a]	City Gate Price	Delivered to Consumers					
			Residential Price	Commercial		Industrial		Electric Utilities Price
				Price	% of Total[b]	Price	% of Total[b]	
1993 Annual Average	**2.04**	**3.21**	**6.16**	**5.22**	**83.9**	**3.07**	**29.7**	**2.61**
1994 Annual Average	**1.85**	**3.07**	**6.41**	**5.44**	**79.3**	**3.05**	**25.5**	**2.28**
1995 Annual Average	**1.55**	**2.78**	**6.06**	**5.05**	**76.7**	**2.71**	**24.5**	**2.02**
1996 Annual Average	**2.17**	**3.34**	**6.34**	**5.40**	**77.6**	**3.42**	**19.4**	**2.69**
1997								
January	3.40	4.28	6.74	6.18	78.8	4.65	21.6	4.06
February	2.49	3.76	6.79	6.13	78.4	4.20	19.7	2.97
March	1.79	3.04	6.52	5.72	74.0	3.35	18.8	2.29
April	1.81	2.92	6.53	5.46	71.8	3.02	18.4	2.30
May	2.00	3.11	6.83	5.39	65.5	2.96	18.1	2.41
June	2.08	3.41	8.30	5.64	61.7	3.10	17.4	2.52
July	2.00	3.44	8.78	5.35	59.5	3.06	15.3	2.44
August	2.08	3.34	8.99	5.43	57.9	2.90	15.6	2.53
September	2.33	3.50	8.84	5.57	59.5	3.25	15.1	2.96
October	2.68	3.86	7.69	5.73	62.9	3.69	16.8	3.24
November	2.92	3.91	6.86	5.85	70.4	4.07	18.0	3.41
December	2.28	3.42	6.54	5.70	72.8	3.79	17.2	2.77
Annual Average	**2.32**	**3.61**	**6.94**	**5.79**	**70.8**	**3.59**	**17.7**	**2.74**
1998								
January	[E]1.99	3.28	6.47	5.59	72.0	3.68	15.1	2.64
February	[E]2.00	3.08	6.40	5.56	70.9	3.52	15.3	2.51
March	[E]2.08	3.22	6.27	5.39	71.5	3.41	16.6	2.53
April	[E]2.22	3.21	6.78	5.58	66.8	3.22	14.9	2.59
May	[E]2.03	3.11	7.59	5.62	60.0	3.10	13.8	2.47
June	[E]1.97	2.99	8.41	5.53	59.6	2.96	13.9	2.40
July	[E]2.08	3.39	8.62	5.62	51.0	3.00	12.7	2.50
August	[E]1.84	3.13	9.19	5.50	49.5	2.73	13.5	2.21
September	[E]1.83	2.76	8.94	5.52	52.9	2.64	14.4	2.15
October	[E]1.84	3.02	7.55	5.32	55.0	2.76	14.1	2.22
November	[E]1.94	3.01	6.60	5.26	62.1	2.83	15.4	2.37
December	[E]1.73	2.44	6.36	5.22	65.5	2.83	16.9	2.22
Annual Average	**[E]1.96**	**3.02**	**6.82**	**5.47**	**64.3**	**3.07**	**14.8**	**2.37**
1999								
January	[E]1.80	2.88	6.18	5.12	71.6	2.97	16.4	2.26
February	[E]1.73	2.93	6.24	5.18	68.3	2.99	15.3	[NA]
1999 YTD[c]	**[E]1.77**	**2.90**	**6.21**	**5.15**	**70.1**	**2.98**	**15.9**	**2.26**
1998 YTD[c]	**[E]2.00**	**3.19**	**6.44**	**5.58**	**71.5**	**3.60**	**15.2**	**2.58**
1997 YTD[c]	**2.95**	**4.05**	**6.76**	**6.16**	**78.6**	**4.44**	**20.7**	**3.51**

[a] See Appendix A, Explanatory Note 8, of the *Natural Gas Monthly (NGM)* for discussion of wellhead prices.

[b] Percentage of total deliveries represented by onsystem sales, see Figure 6. See Table 25 for breakdown by State.

[c] Year-to-date price represents months for which price information is available in the current year.

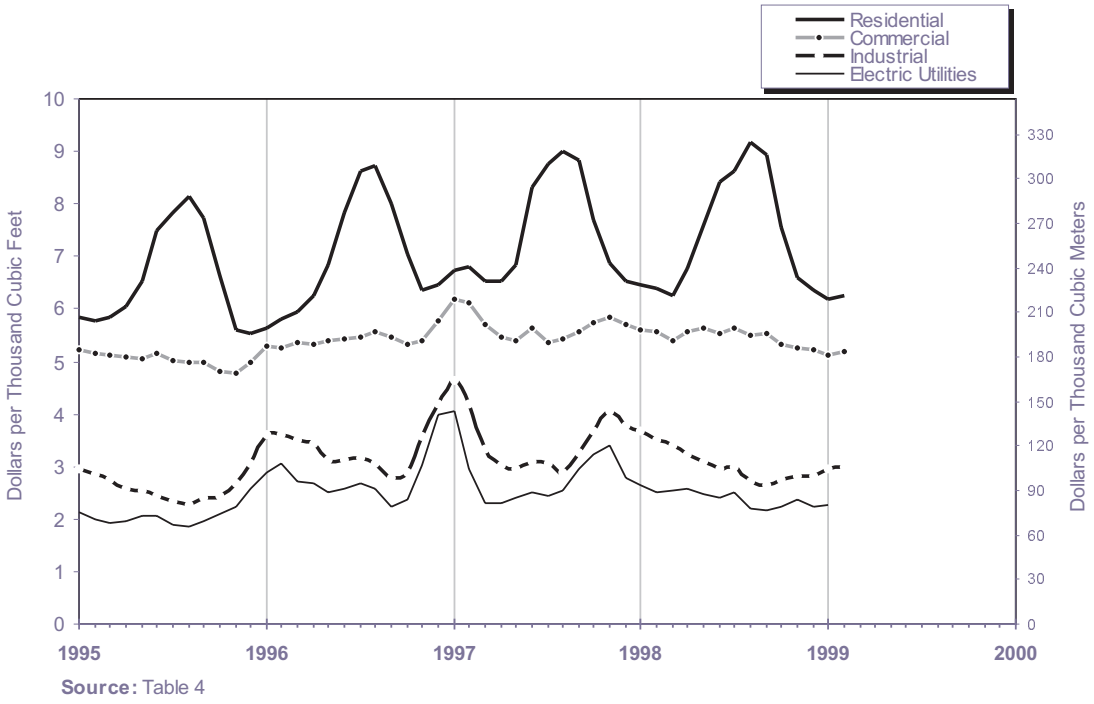
[E] Estimated Data.

[NA] Not Available.

Notes: Data for 1993 through 1997 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia. In 1996, consumption of natural gas for agricultural use is classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use. See Explanatory Note 5 for further explanation.

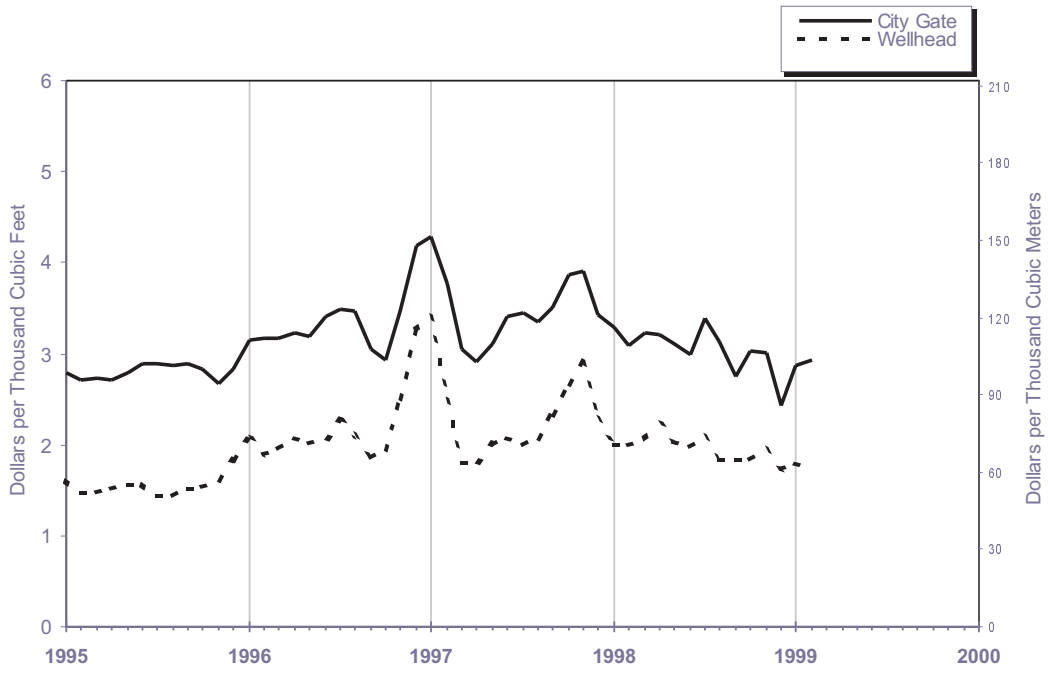
Sources: 1993-1997: Energy Information Administration (EIA) *Natural Gas Annual 1997.* 1998 forward: EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers," Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Plants," and EIA estimates. January 1998 through current month: See Appendix A, Explanatory Note 8 for estimation procedures and revision policy.

Figure 3. Average Price of Natural Gas Delivered to Consumers in the U.S., 1995-1999



Source: Table 4

Figure 4. Average Price of Natural Gas in the United States, 1995-1999



Source: Table 4

Table 5

Table 5. U.S. Natural Gas Imports, by Country, 1993-1999

(Volumes in Million Cubic Feet, Prices in Dollars per Thousand Cubic Feet)

Year and Month	Pipeline				LNG		Other		Total	
	Canada		Mexico		Algeria					
	Volume	Average Price	Volume	Average Price	Volume	Average Price	Volume	Average Price	Volume	Average Price
1993 Total	**2,266,751**	**2.02**	**1,678**	**1.94**	**81,685**	**2.20**	–	–	**2,350,115**	**2.03**
1994 Total	**2,566,049**	**1.86**	**7,013**	**1.99**	**50,778**	**2.28**	–	–	**2,623,839**	**1.87**
1995 Total	**2,816,408**	**1.48**	**6,722**	**1.53**	**17,918**	**2.30**	–	–	**2,841,048**	**1.49**
1996 Total	**2,883,277**	**1.96**	**13,862**	**2.25**	**35,325**	**2.70**	**4,949**	**3.45**	**2,937,413**	**1.97**
1997										
January	266,756	3.27	1,555	3.09	7,560	2.78	[a]2,417	3.68	278,288	3.26
February	230,352	2.50	2,526	2.49	7,667	3.00	—	—	240,545	2.52
March	251,328	1.70	3,127	1.83	2,530	2.98	—	—	256,985	1.72
April	235,431	1.66	189	1.92	2,557	2.23	—	—	238,178	1.67
May	234,345	1.81	2,380	2.03	2,552	2.20	[b]2,455	2.68	241,732	1.83
June	225,366	1.87	1,692	2.20	5,059	2.49	—	—	232,118	1.88
July	229,479	1.82	1,088	1.98	5,026	2.48	—	—	235,593	1.84
August	237,142	1.81	6	2.35	7,535	2.43	—	—	244,684	1.83
September	232,090	2.00	29	2.47	5,030	2.41	[b]2,337	2.88	239,486	2.01
October	245,742	2.32	965	2.92	5,050	2.70	—	—	251,758	2.33
November	257,782	2.71	1,874	2.82	7,542	2.89	[b]4,893	3.07	272,091	2.72
December	253,338	2.17	1,810	2.12	7,567	2.88	—	—	262,716	2.19
Total	**2,899,152**	**2.15**	**17,243**	**2.32**	**65,675**	**2.67**	**12,103**	**3.08**	**2,994,173**	**2.17**
1998										
January	273,189	2.02	56	2.11	10,105	2.89	—	—	283,351	2.05
February	235,288	1.94	2,824	1.97	7,607	2.83	[b]2,171	3.84	247,890	1.98
March	258,067	1.98	382	2.20	5,166	3.12	—	—	263,615	2.00
April	242,191	2.00	3,251	2.37	2,549	2.20	—	—	247,991	2.01
May	242,041	1.97	846	2.15	7,596	2.52	—	—	250,483	1.99
June	243,259	1.92	5	2.21	5,125	2.39	[b]2,441	2.79	250,830	1.94
July	256,506	1.87	1,821	2.13	5,086	2.20	—	—	263,414	1.88
August	249,717	1.79	1,414	1.78	2,540	2.20	[b]2,321	2.80	255,993	1.80
September	260,599	1.75	2,256	1.86	5,133	1.73	—	—	267,988	1.75
October	263,823	1.98	906	1.64	5,025	2.56	—	—	269,753	1.99
November	246,409	2.10	—	—	5,042	2.30	[ab]5,020	3.05	256,470	2.13
December	269,687	2.11	1,418	1.77	7,572	2.49	[ab]4,933	3.10	283,609	2.14
Total	**3,040,775**	**1.95**	**15,179**	**2.02**	**68,546**	**2.52**	**16,885**	**3.09**	**3,141,386**	**1.97**
1999										
January	290,266	NA	[RE]4,900	NA	12,612	NA	—	—	[RE]307,778	NA
February	[R]258,656	NA	[RE]4,400	NA	7,423	NA	[bc]5,038	NA	[RE]275,517	NA
March	[E]266,001	NA	[E]2,200	NA	12,648	NA	—	—	[E]280,849	NA
1999 YTD	**[E]814,924**	NA	**[E]11,500**	NA	**32,683**	NA	**5,038**	NA	**[E]864,144**	NA
1998 YTD	**766,544**	**1.98**	**3,262**	**2.00**	**22,879**	**2.92**	**2,171**	**3.84**	**794,855**	**2.01**
1997 YTD	**748,435**	**2.51**	**7,207**	**2.33**	**17,757**	**2.90**	**2,417**	**3.68**	**775,817**	**2.52**

[a] Received from the United Arab Emirates.
[b] Received from Australia.
[ab] Received from Australia and the United Arab Emirates: November 1998 - Australia 2,353; United Arab Emirates 2,667. December 1998 - Australia 2,348; United Arab Emirates 2,585.
[bc] Received 2,348 from Australia and 2,585 from Qatar.
[R] Revised Data.
[E] Estimated Data.
[RE] Revised Estimated Data.
[NA] Not Available.
— Not Applicable.
– Data not available.

Sources: 1993-1994: Energy Information Administration, Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." January 1995 through the current month (except estimates): Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports.* Estimated pipeline data (shown with an "E") are taken from data from the National Energy Board of Canada plus EIA estimates. LNG data: Industry reports.

Table 6. U.S. Natural Gas Exports, by Country, 1993-1999

(Volumes in Million Cubic Feet, Prices in Dollars per Thousand Cubic Feet)

Year and Month	Pipeline				LNG				Total	
	Canada		Mexico		Japan		Mexico		Volume	Average Price
	Volume	Average Price	Volume	Average Price	Volume	Average Price	Volume	Average Price		
1993 Total	**44,518**	**2.14**	**39,676**	**2.02**	**55,989**	**3.34**	—	—	**140,183**	**2.59**
1994 Total	**52,556**	**2.42**	**46,500**	**1.68**	**62,682**	**3.18**	—	—	**161,738**	**2.50**
1995 Total	**27,554**	**1.96**	**61,283**	**1.50**	**65,283**	**3.41**	—	—	**154,119**	**2.39**
1996 Total	**51,905**	**2.67**	**33,840**	**2.11**	**67,648**	**3.65**	—	—	**153,393**	**2.97**
1997										
January	4,193	4.08	2,231	4.08	5,604	4.25	—	—	12,028	4.16
February	5,169	3.02	1,677	2.32	5,596	4.20	—	—	12,443	3.46
March	9,115	2.05	1,486	1.55	5,675	4.16	—	—	16,276	2.74
April	5,168	1.78	3,044	1.83	5,660	4.06	—	—	13,872	2.72
May	4,107	2.08	2,177	1.96	3,812	3.83	—	—	10,097	2.72
June	3,162	2.28	2,579	2.14	3,786	3.72	—	—	9,527	2.81
July	3,257	2.14	3,122	2.17	3,756	3.66	—	—	10,136	2.71
August	3,820	2.15	6,282	2.37	7,532	3.62	—	—	17,633	2.86
September	3,129	2.37	6,159	2.59	3,767	3.58	—	—	13,055	2.83
October	2,432	2.85	4,182	2.87	5,676	3.58	—	—	12,289	3.19
November	5,579	3.10	1,782	3.16	5,691	3.66	—	—	13,051	3.35
December	7,318	2.58	3,650	2.30	5,631	3.58	—	—	16,600	2.86
Total	**56,447**	**2.52**	**38,372**	**2.46**	**62,187**	**3.83**	—	—	**157,006**	**3.02**
1998										
January	5,056	2.53	4,257	2.11	7,446	3.67	—	—	16,759	2.93
February	4,474	2.14	3,119	2.06	3,726	3.42	—	—	11,319	2.54
March	7,818	2.25	4,204	2.14	7,435	3.09	—	—	19,457	2.55
April	4,409	2.47	2,676	2.22	5,702	2.81	—	—	12,787	2.57
May	2,083	2.28	6,123	2.12	1,891	2.70	—	—	10,097	2.26
June	3,404	1.73	5,618	1.98	5,695	2.69	—	—	14,717	2.20
July	2,533	2.05	3,853	2.20	5,681	2.70	—	—	12,067	2.40
August	1,241	1.92	5,292	1.95	5,676	2.70	1	6.44	R12,209	2.30
September	2,250	1.94	2,892	1.81	7,584	2.68	—	—	12,726	2.35
October	2,305	2.02	5,169	1.90	5,679	2.72	3	6.28	R13,153	2.27
November	4,291	2.21	5,076	2.00	3,776	2.75	10	6.23	R13,143	2.29
December	5,376	2.24	5,322	1.99	5,662	2.68	20	6.22	R16,360	2.31
Total	**45,240**	**2.20**	**53,601**	**2.03**	**65,953**	**2.90**	**34**	**6.22**	**R164,794**	**2.43**
1999										
January	E4,625	NA	RE4,600	NA	5,587	NA	NA	NA	RE14,812	NA
February	E4,950	NA	RE4,800	NA	5,563	NA	NA	NA	RE15,313	NA
March	E7,900	NA	E4,600	NA	5,570	NA	NA	NA	E18,070	NA
1999 YTD	**E17,475**	NA	**E14,000**	NA	**16,720**	NA	NA	NA	**E48,195**	NA
1998 YTD	**17,348**	**2.30**	**11,580**	**2.11**	**18,607**	**3.39**	—	—	**47,535**	**2.68**
1997 YTD	**18,476**	**2.78**	**5,395**	**2.84**	**16,876**	**4.20**	—	—	**40,747**	**3.38**

R Revised Data.
E Estimated Data.
RE Revised Estimated Data.
NA Not Available.
— Not Applicable.

Sources: 1993-1994: Energy Information Administration, Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." January 1995 through the current month (except estimates): Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports.* Estimated pipeline data (shown with an "E") are taken from data from the National Energy Board of Canada plus EIA estimates. LNG data: Industry reports.

Table 7

Table 7. Marketed Production of Natural Gas, by State, 1993-1999

(Million Cubic Feet)

Year and Month	Alabama[b]	Alaska	Arizona	California	Colorado	Florida	Kansas
1993 Total	**388,024**	**430,350**	**597**	**315,851**	**400,985**	**7,085**	**686,347**
1994 Total	**515,272**	**555,402**	**752**	**309,427**	**453,207**	**7,486**	**712,730**
1995 Total	**519,661**	**469,550**	**558**	**279,555**	**523,084**	**6,463**	**721,436**
1996 Total	**530,841**	**480,828**	**463**	**286,494**	**572,071**	**6,006**	**712,796**
1997							
January	48,213	43,497	46	24,430	52,755	527	60,198
February	46,024	39,391	41	21,876	48,424	512	55,275
March	51,313	42,625	42	23,910	53,954	610	60,099
April	51,246	38,687	39	23,248	52,529	554	58,357
May	48,802	35,427	36	23,590	52,376	541	61,661
June	47,342	36,344	28	22,928	50,715	450	59,996
July	46,370	36,284	31	23,981	52,964	514	58,234
August	46,314	36,270	30	23,841	54,041	505	61,937
September	48,911	37,041	30	23,760	52,742	519	49,658
October	50,634	40,095	34	24,437	54,260	452	53,815
November	49,734	39,631	57	24,792	55,549	439	54,152
December	48,368	43,020	39	24,896	57,064	491	53,834
Total	**583,272**	**468,311**	**452**	**285,690**	**637,375**	**6,114**	**687,215**
1998							
January	32,739	43,715	43	24,810	53,025	479	[R]52,204
February	29,230	38,016	42	21,719	51,770	436	[R]49,283
March	33,505	41,026	53	22,869	56,834	466	[R]50,179
April	32,406	38,188	43	21,952	55,760	480	[R]47,405
May	33,656	35,200	38	23,889	56,151	512	[R]46,564
June	33,257	36,116	34	24,837	54,493	428	[E]48,050
July	33,696	36,501	42	27,152	56,370	504	[E]48,048
August	33,719	36,331	36	29,717	56,841	529	[E]48,172
September	30,466	[E]40,036	32	29,096	55,501	445	[R]41,968
October	33,344	[E]46,034	31	29,858	58,862	470	[R]48,568
November	31,876	[E]44,298	33	29,462	51,627	533	[R]46,402
December	32,976	[E]47,760	33	[R]28,879	60,780	515	[R]46,677
Total	**390,870**	**[E]483,221**	**457**	**[R]314,240**	**668,014**	**5,796**	**[RE]573,520**
1999							
January	32,035	[E]42,766	31	29,268	[E]54,000	517	[E]45,373

See footnotes at end of table.

Table 7. Marketed Production of Natural Gas, by State, 1993-1999

(Million Cubic Feet) — Continued

Year and Month	Louisiana[b]	Michigan	Mississippi	Montana	New Mexico	North Dakota	Oklahoma
1993 Total	**4,991,138**	**204,635**	**80,695**	**54,528**	**1,409,429**	**59,851**	**2,049,942**
1994 Total	**5,169,705**	**222,657**	**63,448**	**50,416**	**1,557,689**	**57,805**	**1,934,864**
1995 Total	**5,108,366**	**238,203**	**95,533**	**50,264**	**1,625,837**	**49,468**	**1,811,734**
1996 Total	**5,240,747**	**245,740**	**103,263**	**50,996**	**1,554,087**	**49,674**	**1,734,887**
1997							
January	445,257	34,940	8,253	4,654	135,263	3,952	144,608
February	405,366	16,875	7,807	4,451	122,656	3,899	134,455
March	447,802	24,790	8,470	4,836	137,830	4,453	147,098
April	431,010	12,944	8,120	4,654	132,438	4,364	136,246
May	443,269	39,819	8,611	4,561	136,553	4,539	142,336
June	425,934	19,314	8,893	3,808	125,256	4,348	138,038
July	434,326	40,026	8,636	4,114	131,806	4,427	144,769
August	438,965	18,597	9,626	4,213	134,140	4,486	147,528
September	430,599	22,451	9,162	4,199	128,915	4,381	150,488
October	445,702	20,297	10,084	3,150	134,623	4,508	145,054
November	434,908	26,013	9,683	4,706	120,856	4,416	135,537
December	446,682	29,885	9,955	5,091	118,298	4,629	137,731
Total	**5,229,821**	**305,950**	**107,300**	**52,437**	**1,558,633**	**52,401**	**1,703,888**
1998							
January	467,734	28,439	9,639	[E]5,058	142,312	4,623	159,422
February	418,165	28,259	8,574	[E]4,668	142,383	4,020	125,953
March	470,930	30,719	9,781	[E]5,018	141,671	4,337	136,396
April	456,246	17,983	8,957	[E]4,714	140,963	4,284	134,017
May	473,557	29,164	9,121	[E]4,672	140,258	4,488	136,703
June	[E]454,466	26,962	8,586	[E]3,805	139,557	4,210	130,734
July	[E]454,506	26,188	9,258	[E]3,990	138,859	4,384	133,099
August	[E]457,471	19,037	8,835	[E]4,242	138,165	4,499	135,122
September	[E]438,628	28,469	8,664	[E]4,332	137,474	4,427	[E]142,267
October	[E]462,358	21,908	8,868	[E]4,346	136,786	4,600	[E]140,146
November	[E]440,854	12,272	8,602	[E]4,934	136,102	4,428	[E]133,360
December	[E]461,135	29,159	9,184	[E]5,280	[R]135,422	4,536	[E]136,123
Total	**[E]5,456,050**	**298,560**	**108,069**	**[E]55,059**	**[R]1,669,951**	**52,834**	**[E]1,643,342**
1999							
January	[E]466,143	[E]20,853	9,154	[E]5,090	134,745	4,331	[E]144,408

See footnotes at end of table.

Table 7

Table 7. Marketed Production of Natural Gas, by State, 1993-1999

(Million Cubic Feet) — Continued

Year and Month	Oregon	Texas[c]	Utah	Wyoming	Other[a] States	U.S. Total
1993 Total	**4,003**	**6,249,624**	**225,401**	**634,957**	**788,472**	**18,981,915**
1994 Total	**3,221**	**6,353,844**	**270,858**	**696,018**	**774,724**	**19,709,525**
1995 Total	**1,923**	**6,330,048**	**241,290**	**673,775**	**759,728**	**19,506,474**
1996 Total	**1,439**	**6,449,022**	**250,767**	**666,036**	**814,612**	**19,750,793**
1997						
January	105	554,934	21,782	59,016	66,837	1,709,269
February	98	506,768	19,115	55,848	59,897	1,548,774
March	101	564,269	21,912	61,159	64,286	1,719,559
April	102	539,499	19,570	64,278	61,118	1,639,002
May	102	552,230	22,053	62,726	62,301	1,701,532
June	97	529,765	19,815	59,667	59,069	1,611,809
July	98	546,610	21,711	60,324	58,493	1,673,719
August	99	548,267	21,024	61,091	59,686	1,670,660
September	86	525,836	22,007	64,678	56,803	1,632,265
October	97	540,150	23,006	64,992	62,912	1,678,302
November	91	519,274	22,840	62,181	60,863	1,625,720
December	96	526,271	22,307	62,410	64,414	1,655,481
Total	**1,173**	**6,453,873**	**257,139**	**738,368**	**736,679**	**19,866,093**
1998						
January	90	542,462	21,826	66,074	[E]61,837	[RE]1,716,531
February	79	491,530	21,758	53,970	[E]57,200	[RE]1,547,056
March	96	541,311	23,656	65,704	[E]61,188	[RE]1,695,739
April	92	525,602	23,513	61,974	[E]57,188	[RE]1,631,767
May	92	550,442	24,967	54,304	[E]58,146	[RE]1,681,924
June	90	527,613	23,968	63,574	[E]56,699	[E]1,637,477
July	95	547,880	23,036	64,917	[E]55,998	[E]1,664,522
August	94	561,133	23,681	66,273	[E]57,217	[E]1,681,113
September	90	529,321	21,554	63,370	[E]55,348	[RE]1,631,487
October	83	534,431	23,830	62,709	[E]59,433	[RE]1,676,665
November	85	520,580	23,045	66,979	[E]59,256	[RE]1,614,728
December	80	525,805	22,507	[R]64,357	[E]62,674	[RE]1,673,880
Total	**1,067**	**6,398,110**	**277,340**	**[R]754,206**	**[E]702,185**	**[RE]19,852,889**
1999						
January	83	528,793	[E]22,266	62,445	[E]60,748	[E]1,663,050

[a] Includes Arkansas, Illinois, Indiana, Kentucky, Maryland, Missouri, Nebraska, Nevada, New York, Ohio, Pennsylvania, South Dakota, Tennessee, Virginia and West Virginia. The 1998 monthly values for these States are estimated.

[b] All data for 1991 through 1996 include Federal Offshore production. For 1997 and 1998, data for Alabama exclude Federal Offshore production and data for Louisiana include both the Louisana and Alabama portions of Federal Offshore production.

[c] Federal offshore production volumes are included.

[R] Revised Data.

[E] Estimated Data.

[RE] Revised Estimated Data.

Notes: Data for 1993 through 1997 are final. All other data are preliminary unless otherwise indicated. Totals may not equal sum of components because of independent rounding. See Appendix A, Explanatory Notes 1 and 3 for discussion of computation procedures and revision policy.

Sources: 1992-1997: Energy Information Administration (EIA), *Natural Gas Annual 1997*.1998 through current month: Form EIA-895, "Monthly Quantity of Natural Gas Report," Minerals Management Service reports, and EIA computations.

Table 8. Gross Withdrawals and Marketed Production of Natural Gas by State, January 1999

(Million Cubic Feet)

State	Gross Withdrawals			Repressuring	Nonhydrocarbon Gases Removed[a]	Vented and Flared	Marketed Production
	From Gas Wells	From Oil Wells	Total				
Alabama	34,862	610	35,472	1,155	2,181	101	32,035
Alaska	[E]17,165	[E]294,514	[E]311,679	[E]267,966	0	[E]947	[E]42,766
Arizona	31	0	31	0	0	0	31
California	7,084	27,085	34,168	4,663	160	78	29,268
Colorado	[E]47,050	[E]7,535	[E]54,586	[E]495	0	[E]90	[E]54,000
Florida	0	584	584	0	67	0	517
Kansas	[E]41,856	[E]3,640	[E]45,496	[E]77	0	[E]45	[E]45,373
Louisiana	[E]410,203	[E]61,665	[E]471,868	[E]3,701	[E]0	[E]2,024	[E]466,143
Michigan	[E]16,972	[E]4,243	[E]21,215	[E]149	0	[E]212	[E]20,853
Mississippi	10,091	555	10,646	564	697	230	9,154
Montana	[E]4,504	[E]789	[E]5,293	[E]6	0	[E]196	[E]5,090
New Mexico	127,190	22,048	149,237	909	13,342	242	134,745
North Dakota	1,409	3,207	4,616	0	5	280	4,331
Oklahoma	[E]130,277	[E]14,131	[E]144,408	[E]0	[E]0	[E]0	[E]144,408
Oregon	99	0	99	4	12	0	83
Texas	468,860	113,450	582,310	37,684	13,383	2,450	528,793
Utah	[E]21,180	[E]3,336	[E]24,516	[E]49	0	[E]2,200	[E]22,266
Wyoming	96,691	4,626	101,317	12,276	13,289	13,307	62,445
Other States	[E]57,362	[E]4,274	[E]61,636	[E]177	[E]557	[E]154	[E]60,748
Total	**[E]1,492,885**	**[E]566,292**	**[E]2,059,177**	**[E]329,875**	**[E]43,694**	**[E]22,558**	**[E]1,663,050**

[a] See Appendix A, Explanatory Note 1, for a discussion of data on Nonhydrocarbon Gases Removed.

[E] Estimated Data.

Notes: All monthly data are considered preliminary until publication of the *Natural Gas Annual* for that year. Totals may not equal sum of components because of independent rounding. See Appendix A, Explanatory Notes 1 and 3 for discussion of computation procedures and revision policy.

Sources: Form EIA-895, "Monthly Quantity of Natural Gas Report."

Table 9

Table 9. Underground Natural Gas Storage - All Operators, 1993-1999

(Volumes in Billion Cubic Feet)

Year and Month	Natural Gas in Underground Storage at End of Period			Change In Working Gas from Same Period Previous Year		Storage Activity		
	Base Gas	Working Gas	Total[b]	Volume	Percent	Injections	Withdrawals	Net Withdrawals[c]
1993 Total[a]	**4,327**	**2,322**	**6,649**	**-275**	**-10.6**	**2,760**	**2,717**	**-43**
1994 Total[a]	**4,360**	**2,606**	**6,966**	**284**	**12.2**	**2,796**	**2,508**	**-288**
1995 Total[a]	**4,349**	**2,153**	**6,503**	**-453**	**3.1**	**2,566**	**2,974**	**408**
1996 Total[a]	**4,341**	**2,173**	**6,513**	**19**	**0.9**	**2,906**	**2,911**	**6**
1997								
January	4,347	1,496	5,843	32	2.3	68	753	684
February	4,342	1,139	5,481	118	11.6	55	413	358
March	4,345	990	5,336	232	30.7	131	285	155
April	4,342	1,051	5,393	196	23.1	205	146	-59
May	4,340	1,365	5,704	202	17.5	362	41	-321
June	4,357	1,731	6,088	202	13.2	407	42	-365
July	4,356	2,017	6,372	119	6.3	361	78	-282
August	4,357	2,338	6,695	93	4.2	378	56	-322
September	4,360	2,672	7,033	67	2.6	380	44	-336
October	4,358	2,886	7,244	75	2.7	294	84	-210
November	4,359	2,699	7,058	150	5.9	113	302	189
December	4,350	2,175	6,525	2	0.1	45	579	533
Total	—	—	—	—	—	**2,800**	**2,824**	**24**
1998								
January	4,347	1,713	6,060	218	14.5	68	535	466
February	4,341	1,419	5,760	280	24.6	74	373	300
March	4,342	1,185	5,527	194	19.6	136	378	242
April	4,339	1,382	5,721	331	31.5	277	78	-199
May	4,340	1,775	6,115	410	30.0	435	42	-393
June	4,346	2,103	6,448	372	21.5	375	52	-323
July	4,340	2,417	6,757	401	19.9	366	52	-314
August	4,336	2,697	7,033	359	15.4	342	58	-283
September	4,340	2,949	7,289	277	10.4	305	78	-227
October	4,342	3,176	7,517	290	10.0	301	46	-255
November	4,340	3,143	7,483	444	16.5	131	165	34
December	4,326	2,718	7,044	543	25.0	94	530	435
Total	—	—	—	—	—	**2,905**	**2,386**	**-518**
1999								
January	4,327	2,094	6,421	381	22.2	55	678	623
February	4,312	1,792	6,104	372	26.2	62	395	333
March	[d]4,361	[d]1,430	5,792	246	20.7	84	381	297
April(STIFS)	[RE]4,361	[RE]1,500	[R]5,861	[RE]117	[RE]8.5	NA	NA	[RE]-70
May(STIFS)	[E]4,361	[E]1,825	[E]6,186	[E]50	[E]2.8	NA	NA	[E]-325

[a] Total as of December 31.

[b] Total underground storage capacity at the end of each calendar year (in billion cubic feet): 1991 - 7,993; 1992 - 7,932; 1993 - 7,989; 1994 - 8,043; 1995 - 7,927; 1996 - 8,159; and 1997 - 8,128.

[c] Negative numbers indicate the volume of injections in excess of withdrawals. Positive numbers indicate the volume of withdrawals in excess of injections.

[d] Reflects one respondent's reclassification of natual gas in underground storage from working gas to base gas.

[R] Revised Data.

[E] Estimated Data.

[RE] Revised Estimated Data.

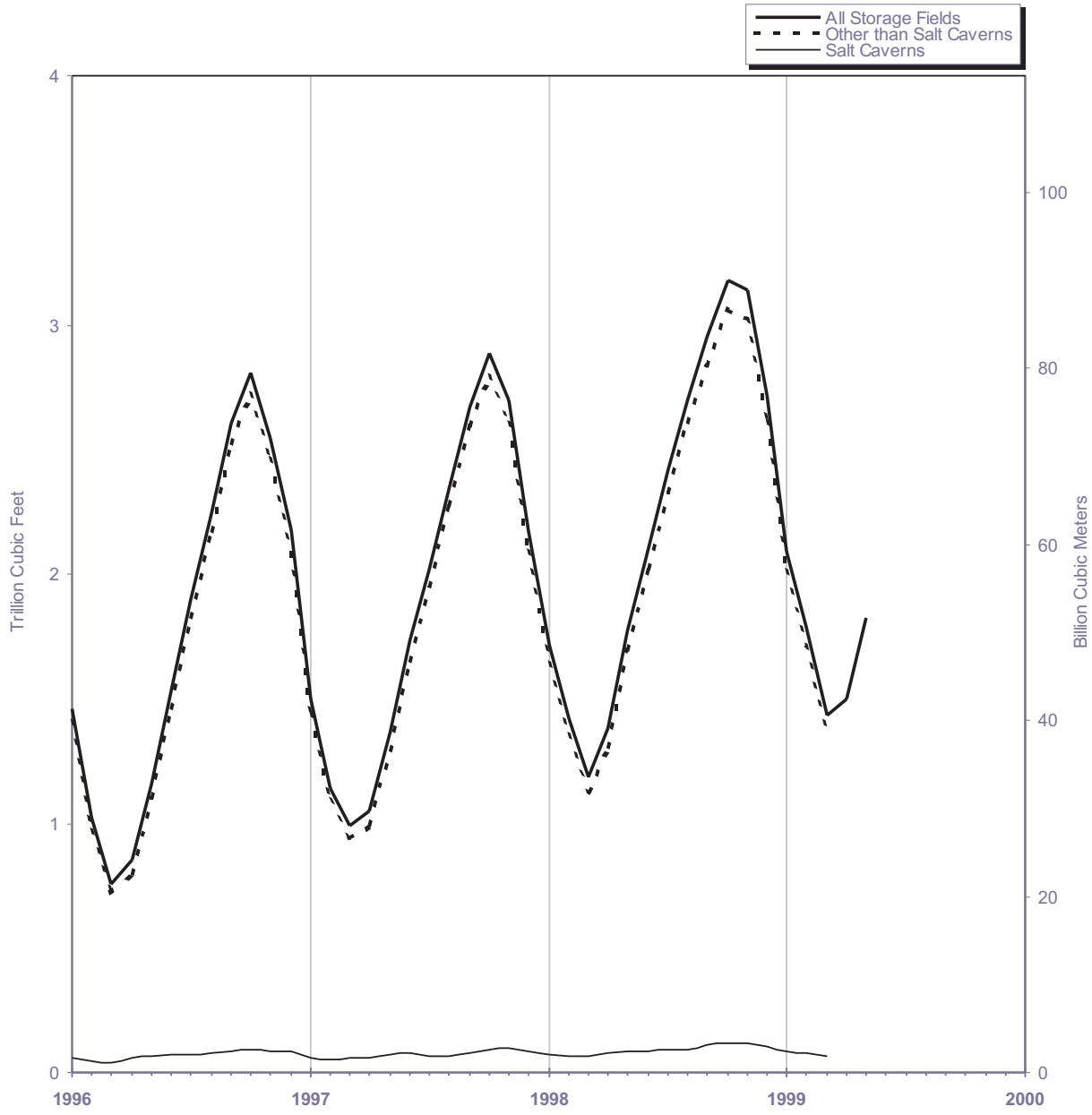
NA Not Available.

— Not Applicable.

Notes: Data for 1993 through 1997 are final. All other data are preliminary unless otherwise noted. Estimates for the most recent two months are derived from the Short-Term Integrated Forecasting System (STIFS). See Explanatory Note 7 of the *Natural Gas Monthly* for discussion of revision policy. Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia.

Sources: Form EIA-191, "Monthly Underground Gas Storage Report, "Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," and STIFS.

Figure 5. Working Gas in Underground Natural Gas Storage in the U.S., 1996-1999



Sources: Energy Information Administration, Form EIA-191, "Monthly Underground Gas Storage Report," and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 10

Table 10. Underground Natural Gas Storage - by Season, 1996-1999

(Volumes in Billion Cubic Feet)

Year, Season and Month	Natural Gas in Underground Storage at End of Period			Change In Working Gas from Same Period Previous Year		Storage Activity		
	Base Gas	Working Gas	Total	Volume	Percent	Injections	Withdrawals	Net Withdrawals[a]
October 1996	4,335	2,810	7,145	--	--	--	--	--
1996-1997 Heating Season								
November	4,339	2,549	6,889	-179	-6.6	90	354	264
December	4,341	2,173	6,513	19	0.9	86	461	374
January	4,347	1,496	5,843	32	2.3	68	753	684
February	4,342	1,139	5,481	118	11.6	55	413	358
March	4,345	990	5,336	232	30.7	131	285	155
Total	—	—	—	—	—	**430**	**2,266**	**1,835**
1997 Refill Season								
April	4,342	1,051	5,393	196	23.1	205	146	-59
May	4,340	1,365	5,704	202	17.5	362	41	-321
June	4,357	1,731	6,088	202	13.2	407	42	-365
July	4,356	2,017	6,372	119	6.3	361	78	-282
August	4,357	2,338	6,695	93	4.2	378	56	-322
September	4,360	2,672	7,033	67	2.6	380	44	-336
October	4,358	2,886	7,244	75	2.7	294	84	-210
Total	—	—	—	—	—	**2,388**	**492**	**-1,896**
1997-1998 Heating Season								
November	4,359	2,699	7,058	150	5.9	113	302	189
December	4,350	2,175	6,525	2	0.1	45	579	533
January	4,347	1,713	6,060	218	14.5	68	535	466
February	4,341	1,419	5,760	280	24.6	74	373	300
March	4,342	1,185	5,527	194	19.6	136	378	242
Total	—	—	—	—	—	**436**	**2,167**	**1,730**
1998 Refill Season								
April	4,339	1,382	5,721	331	31.5	277	78	-199
May	4,340	1,775	6,115	410	30.0	435	42	-393
June	4,346	2,103	6,448	372	21.5	375	52	-323
July	4,340	2,417	6,757	401	19.9	366	52	-314
August	4,336	2,697	7,033	359	15.4	342	58	-283
September	4,340	2,949	7,289	277	10.4	305	78	-227
October	4,342	3,176	7,517	290	10.0	301	46	-255
Total	—	—	—	—	—	**2,402**	**407**	**-1,995**
1998-1999 Heating Season								
November	4,340	3,143	7,483	444	16.5	131	165	34
December	4,326	2,718	7,044	543	25.0	94	530	435
January	4,327	2,094	6,421	381	22.2	55	678	623
February	4,312	1,792	6,104	372	26.2	62	395	333
March	[b]4,361	[b]1,430	5,792	246	20.7	84	381	297
Total	—	—	—	—	—	**[R]427**	**[R]2,148**	**[R]1,721**
1999 Refill Season								
April(STIFS)	[RE]4,361	[RE]1,500	[R]5,861	[RE]117	[RE]8.5	NA	NA	[RE]-70
May(STIFS)	[E]4,361	[E]1,825	[E]6,186	[E]50	[E]2.8	NA	NA	[E]-325

[a] Negative numbers indicate the volume of injections in excess of withdrawals. Positive numbers indicate the volume of withdrawals in excess of injections.

[b] Reflects one respondent's reclassification of natual gas in underground storage from working gas to base gas.

[R] Revised Data.

[E] Estimated Data.

[RE] Revised Estimated Data.

NA Not Available.

— Not Applicable.

Notes: Data for 1996 and 1997 are final. All other data are preliminary unless otherwise noted. Estimates for the most recent two months are derived from the Short-Term Integrated Forecasting System (STIFS). See Explanatory Note 7 of the *Natural Gas Monthly* for discussion of revision policy. Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. This is due to changes in the quantities of native gas included in base gas and/or losses in base gas due to migration from storage reservoirs. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia.

Sources: Form EIA-191, "Underground Natural Gas Storage Report," Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," and STIFS.

Table 11. Underground Natural Gas Storage - Salt Cavern Storage Fields, 1994 - 1999

(Volumes in Billion Cubic Feet)

Year and Month	Natural Gas in Salt Cavern Underground Storage at End of Period			Change in Working Gas from Same Period Previous Year		Storage Activity		
	Base Gas	Working Gas	Total	Volume	Percent	Injections	Withdrawals	Net Withdrawals
1994 Total[c]	**44**	**70**	**113**	—	—	**142**	**123**	**-19**
1995 Total[c]	**60**	**72**	**131**	**2**	**2.9**	**194**	**200**	**5**
1996 Total[c]	**64**	**85**	**149**	**14**	**18.8**	**258**	**246**	**-13**
1997								
January	65	57	122	-2	-3.1	21	51	30
February	59	49	109	2	4.0	15	23	8
March	65	56	121	18	47.3	22	16	-6
April	65	58	123	1	1.8	22	19	-2
May	65	73	138	10	17.3	27	13	-14
June	66	80	145	8	11.7	22	16	-7
July	65	66	131	-6	-7.5	15	30	15
August	65	67	132	-11	-12.4	23	22	0
September	65	78	143	-9	-8.7	27	14	-12
October	66	93	159	4	5.6	30	14	-16
November	67	95	162	7	9.4	25	24	-2
December	67	83	150	-4	-3.0	19	31	12
Total	—	—	—	—	—	**267**	**274**	**6**
1998								
January	66	70	136	13	23.0	17	31	14
February	65	68	133	18	36.4	17	21	3
March	68	64	132	8	14.6	23	29	6
April	68	80	148	22	38.1	29	11	-17
May	68	83	151	10	13.0	26	22	-3
June	66	83	149	3	4.3	21	23	2
July	66	92	158	26	39.6	26	18	-8
August	66	93	159	27	40.0	24	21	-3
September	67	112	180	35	44.9	22	30	8
October	67	116	183	23	24.4	44	12	-32
November	67	119	187	24	25.5	22	17	-5
December	67	104	171	22	26.4	17	32	14
Total	—	—	—	—	—	**288**	**267**	**-21**
1999								
January	69	84	153	14	19.6	19	41	22
February	67	77	144	10	14.3	15	20	5
March	67	68	135	4	6.0	18	26	8

[c] Total as of December 31.

— Not Applicable.

Notes: Data for 1994 through 1997 are final. All other data are preliminary unless otherwise noted. See Explanatory Note 7 of the *Natural Gas Monthly* for discussion of the reporting of underground storage information. Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. This is due to changes in the quantities of native gas included in base gas and/or losses in base gas due to migration from storage reservoirs. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia. Positive net withdrawals indicate the volume of withdrawals in excess of injections. Negative net withrawals indicate the volume of injections in excess of withdrawals.

Sources: Form EIA-191, "Monthly Underground Gas Storage Report," and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 12

Table 12. Underground Natural Gas Storage - Storage Fields Other than Salt Caverns, 1994-1999

(Volumes in Billion Cubic Feet)

Year and Month	Natural Gas in Non-Salt Cavern Underground Storage at End of Period			Change in Working Gas from Same Period Previous Year		Storage Activity		
	Base Gas	Working Gas	Total	Volume	Percent	Injections	Withdrawals	Net Withdrawals
1994 Total[c]	**4,317**	**2,536**	**6,853**	—	—	**2,654**	**2,385**	**-269**
1995 Total[c]	**4,290**	**2,082**	**6,371**	**-455**	**-17.9**	**2,372**	**2,774**	**403**
1996 Total[c]	**4,277**	**2,087**	**6,364**	**6**	**0.3**	**2,647**	**2,665**	**18**
1997								
January	4,282	1,439	5,721	34	2.5	47	702	654
February	4,283	1,090	5,372	116	12.0	40	390	350
March	4,280	935	5,215	214	29.8	109	269	160
April	4,277	993	5,270	195	24.6	184	127	-56
May	4,275	1,292	5,566	191	17.6	335	28	-307
June	4,291	1,651	5,942	194	13.3	385	26	-358
July	4,290	1,951	6,241	124	6.8	346	49	-297
August	4,291	2,271	6,563	103	4.7	356	34	-322
September	4,295	2,595	6,890	75	3.0	353	29	-324
October	4,292	2,793	7,085	70	2.6	265	70	-195
November	4,292	2,604	6,896	142	5.8	88	278	191
December	4,283	2,092	6,375	4	0.2	27	548	521
Total	—	—	—	—	—	**2,533**	**2,551**	**18**
1998								
January	4,281	1,643	5,923	204	14.2	51	504	453
February	4,275	1,352	5,627	262	24.0	56	353	296
March	4,274	1,121	5,394	186	19.9	113	349	236
April	4,271	1,302	5,573	309	31.1	248	67	-181
May	4,272	1,692	5,964	400	31.0	410	20	-390
June	4,279	2,020	6,299	368	22.3	354	29	-325
July	4,274	2,326	6,600	375	19.2	340	34	-306
August	4,270	2,604	6,875	333	14.7	318	37	-281
September	4,273	2,837	7,109	242	9.3	284	48	-236
October	4,274	3,060	7,334	267	9.6	257	34	-223
November	4,272	3,024	7,296	420	16.1	108	147	39
December	4,259	2,614	6,873	522	24.9	77	498	421
Total	—	—	—	—	—	**2,617**	**2,120**	**-497**
1999								
January	4,257	2,010	6,268	367	22.4	37	638	601
February	4,245	1,714	5,960	363	26.8	47	375	328
March	4,294	1,363	5,657	242	21.6	67	355	289

[c] Total as of December 31.

— Not Applicable.

Notes: Data for 1994 through 1997 are final. All other data are preliminary unless otherwise noted. See Explanatory Note 7 of the *Natural Gas Monthly* for discussion of the reporting of underground storage information. Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. This is due to changes in the quantities of native gas included in base gas and/or losses in base gas due to migration from storage reservoirs. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia. Positive net withdrawals indicate the volume of withdrawals in excess of injections. Negative net withdrawals indicate the volume of injections in excess of withdrawals.

Sources: Form EIA-191, "Monthly Underground Gas Storage Report," and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 13. Net Withdrawals from Underground Storage, by State, 1997-1999

(Volumes in Million Cubic Feet)

State	1999			1998			
	March	February	January	Total	December	November	October
Alabama	312	114	813	-447	139	-1	-613
Arkansas	690	1,049	2,066	-1,774	1,245	63	-580
California	9,782	18,491	23,789	-44,006	29,749	-10,022	-23,926
Colorado	3,319	3,684	3,990	-4,885	7,416	-1,764	-2,043
Illinois	27,580	41,907	56,407	-11,545	26,858	9,641	-27,923
Indiana	3,622	2,942	5,558	1,424	4,038	-618	-2,904
Iowa	5,170	11,814	20,553	-3,131	20,547	-68	-7,108
Kansas	13,977	9,273	22,470	-20,440	14,055	3,658	-8,737
Kentucky	6,081	7,825	12,241	-12,142	10,397	1,776	-5,237
Louisiana	10,263	15,966	43,591	-70,560	38,892	1,326	-30,831
Maryland	1,208	1,982	3,399	237	2,068	124	-1,267
Michigan	53,123	57,189	112,276	-77,044	60,725	18,548	-27,089
Minnesota	167	238	287	442	438	-84	-187
Mississippi	6,840	3,303	9,981	-8,781	5,256	701	-9,800
Missouri	150	343	170	174	573	-204	-208
Montana	2,410	3,375	4,860	-401	3,962	2,606	-1,532
Nebraska	1,338	442	698	298	1,215	536	-363
New Mexico	943	83	1,364	-6,247	-619	-1,243	-1,903
New York	10,688	10,057	15,534	-10,575	6,448	1,054	-4,464
Ohio	33,698	33,362	53,448	-26,542	35,311	7,921	-12,746
Oklahoma	8,079	-881	31,284	-34,004	40,863	-473	-19,520
Oregon	1,185	1,717	1,979	829	1,888	28	4
Pennsylvania	44,023	50,445	83,851	-30,915	46,400	30	-20,091
Tennessee	80	131	130	-60	131	0	-103
Texas	14,152	9,654	43,297	-108,737	36,143	-3,908	-34,137
Utah	5,738	6,185	10,569	-16,395	8,751	2,231	-3,879
Virginia	325	449	317	-709	359	0	-229
Washington	1,113	3,144	603	-509	3,226	-730	719
West Virginia	30,271	36,278	53,983	-28,894	26,188	3,337	-7,094
Wyoming	352	2,050	3,464	-2,837	2,621	-614	-1,425
AGA Regions							
Producing	54,944	38,447	154,055	-250,543	135,835	124	-105,507
Eastern Consuming	217,668	255,282	419,379	-199,871	241,397	42,077	-117,437
Western Consuming	24,066	38,885	49,540	-67,763	58,052	-8,349	-32,268
Total	**296,678**	**332,615**	**622,974**	**-518,177**	**435,284**	**33,852**	**-255,212**

See footnotes at end of table.

Table 13

Table 13. Net Withdrawals from Underground Storage, by State, 1997-1999

(Volumes in Million Cubic Feet) — Continued

State	1998						
	September	August	July	June	May	April	March
Alabama	401	-200	9	-623	-144	-245	248
Arkansas	-817	-1,005	-1,034	-1,100	-1,046	-471	1,039
California	-9,990	-7,283	-9,435	-27,493	-29,210	-10,710	-2,257
Colorado	-5,919	-5,877	-4,060	-3,907	-6,040	3,534	3,928
Illinois	-28,122	-31,634	-25,062	-31,348	-25,967	-293	28,186
Indiana	-4,534	-3,695	-2,476	-575	-446	917	4,249
Iowa	-12,149	-12,102	-11,525	-8,405	-3,600	348	6,692
Kansas	-9,284	-12,200	-13,108	-6,267	-19,324	-6,954	14,438
Kentucky	-8,821	-4,533	-10,622	-8,137	-11,793	-2,480	7,768
Louisiana	-9,708	-20,159	-25,597	-14,635	-22,794	-21,191	7,400
Maryland	-783	-1,407	-2,924	-1,251	-808	-1,127	1,631
Michigan	-31,023	-52,128	-60,857	-69,589	-69,296	-31,779	55,388
Minnesota	-275	-214	-289	-169	0	159	416
Mississippi	156	-4,139	-5,961	-2,887	-3,438	-2,757	2,405
Missouri	-414	-203	8	143	-460	48	423
Montana	-4,239	-4,524	-2,295	-2,024	-2,571	224	3,017
Nebraska	-864	-616	-796	-528	-860	754	1,090
New Mexico	-1,185	-208	-191	-180	-1,120	287	658
New York	-5,640	-5,247	-8,108	-8,786	-11,267	-3,673	7,977
Ohio	-19,259	-27,246	-31,220	-25,882	-35,968	-14,906	28,619
Oklahoma	-12,146	-7,189	-7,554	-12,460	-23,277	-21,343	7,159
Oregon	-818	-819	-852	-1,411	0	81	934
Pennsylvania	-27,252	-19,657	-31,998	-34,236	-57,800	-32,842	38,957
Tennessee	-102	-112	-134	0	0	0	83
Texas	-5,040	-18,629	-18,872	-20,145	-27,286	-40,395	-9,062
Utah	-8,260	-7,385	-7,265	-8,225	-7,364	-596	1,199
Virginia	-272	-341	-190	-309	-313	-209	312
Washington	-1,822	-3,640	-312	-2,963	-3,932	1,544	3,329
West Virginia	-16,425	-29,075	-28,560	-26,404	-26,003	-14,607	22,818
Wyoming	-2,602	-2,008	-2,807	-3,406	-1,344	89	2,611
AGA Regions							
Producing	-38,023	-63,530	-72,318	-57,675	-98,285	-92,824	24,038
Eastern Consuming	-155,259	-188,197	-214,455	-215,931	-244,724	-100,092	204,441
Western Consuming	-33,925	-31,751	-27,316	-49,599	-50,461	-5,674	13,177
Total	**-227,207**	**-283,478**	**-314,088**	**-323,205**	**-393,470**	**-198,591**	**241,655**

See footnotes at end of table.

Table 13. Net Withdrawals from Underground Storage, by State, 1997-1999

(Volumes in Million Cubic Feet) — Continued

State	1998		1997				
	February	January	Total	December	November	October	September
Alabama	187	396	-162	243	243	-251	-262
Arkansas	875	1,057	250	1,526	651	271	-1,048
California	26,766	29,805	16,340	58,418	2,846	-11,717	-6,637
Colorado	6,337	3,510	-525	5,026	2,503	359	-5,203
Illinois	36,082	58,036	-10,153	44,906	2,805	-28,399	-35,655
Indiana	3,322	4,144	984	4,193	-879	-3,088	-4,559
Iowa	5,335	18,905	-6,255	17,041	505	-8,412	-12,825
Kansas	8,180	15,103	-11,372	12,277	8,384	-7,782	-13,351
Kentucky	9,981	9,559	3,013	10,773	4,035	-2,926	-7,983
Louisiana	5,164	21,574	-9,248	43,644	20,997	-24,035	-29,291
Maryland	2,745	3,236	-544	1,298	33	-2,346	-2,838
Michigan	45,886	84,170	-3,388	78,027	53,016	-32,466	-65,209
Minnesota	203	444	-373	4	4	0	-130
Mississippi	4,251	7,431	3,763	8,484	1,089	-2,126	-5,224
Missouri	10	458	-453	228	-207	-215	-240
Montana	2,554	4,421	11,962	3,169	2,760	1,015	-1,490
Nebraska	355	376	-1,590	944	124	-69	-1,099
New Mexico	-130	-412	2,065	2,500	25	-1,305	-853
New York	9,548	11,582	304	10,735	4,857	-2,211	-6,455
Ohio	34,023	34,810	-7,336	40,530	15,502	-8,809	-23,499
Oklahoma	737	21,199	-9,482	25,362	13,995	-19,663	-14,556
Oregon	1,253	540	-1,316	1,036	-262	-97	-410
Pennsylvania	49,786	57,788	28,381	53,825	26,061	-15,914	-48,745
Tennessee	60	116	0	0	0	0	0
Texas	-3,341	35,935	10,035	53,619	18,531	-30,600	-21,731
Utah	6,783	7,613	-7,571	13,169	2,721	-1,301	-3,235
Virginia	437	46	0	0	0	0	0
Washington	4,131	-58	-1,003	3,159	83	702	-2,268
West Virginia	36,285	30,647	16,716	36,318	6,615	-8,145	-19,091
Wyoming	2,059	3,990	908	3,019	1,906	-591	-2,454
AGA Regions							
Producing	15,735	101,887	-13,990	147,412	63,672	-85,240	-86,054
Eastern Consuming	234,042	314,267	19,518	299,061	112,710	-113,251	-228,461
Western Consuming	50,086	50,266	18,423	87,001	12,560	-11,630	-21,826
Total	**299,863**	**466,420**	**23,950**	**533,474**	**188,941**	**-210,121**	**-336,341**

See footnotes at end of table.

Table 13

Table 13. Net Withdrawals from Underground Storage, by State, 1997-1999

(Volumes in Million Cubic Feet) — Continued

State	1997					
	August	July	June	May	April	March
Alabama	-286	-43	-93	-271	-130	-25
Arkansas	-1,234	-1,472	-1,340	-608	178	342
California	-7,805	-11,213	-22,886	-23,687	-18,968	-289
Colorado	-4,559	-5,592	-5,293	-5,375	5,441	2,020
Illinois	-35,387	-32,161	-27,571	-23,526	-636	22,821
Indiana	-3,722	-3,299	-1,913	-110	1,444	2,537
Iowa	-11,001	-8,818	-8,375	-3,470	1,634	2,966
Kansas	-11,129	-3,488	-11,777	-9,463	-1,497	4,053
Kentucky	-6,520	-7,430	-8,997	-7,828	-363	4,141
Louisiana	-15,446	-11,847	-19,809	-19,573	-3,990	-18,885
Maryland	-2,353	-1,536	-1,700	-1,632	114	1,896
Michigan	-73,230	-75,558	-73,547	-46,757	-14,032	53,634
Minnesota	-142	-321	-312	-273	-40	177
Mississippi	-3,109	741	-3,797	-5,573	449	-2,294
Missouri	-379	-433	-112	-1,200	56	1,174
Montana	-2,339	-2,710	-1,633	-846	1,810	2,591
Nebraska	-971	-76	-803	-714	-47	-245
New Mexico	-328	587	-534	-1,228	583	501
New York	-11,606	-11,663	-11,184	-7,589	-1,623	9,239
Ohio	-32,174	-34,224	-37,483	-34,205	-1,447	21,559
Oklahoma	-8,393	-811	-7,984	-18,407	-7,180	-8,168
Oregon	-1,178	-1,301	-1,681	-1,300	543	919
Pennsylvania	-44,878	-42,074	-50,051	-43,897	-3,188	50,395
Tennessee	0	0	0	0	0	0
Texas	-12,881	10,561	-20,379	-28,071	-17,396	-21,279
Utah	-5,284	-8,117	-7,950	-4,255	-2,150	-2,620
Virginia	0	0	0	0	0	0
Washington	982	-495	-3,766	-5,881	-71	3,200
West Virginia	-24,119	-26,183	-31,856	-24,165	1,674	23,270
Wyoming	-2,727	-3,411	-2,304	-1,127	137	1,090
AGA Regions						
Producing	-52,520	-5,729	-65,620	-82,922	-28,852	-45,732
Eastern Consuming	-246,626	-243,499	-253,685	-195,364	-16,545	193,362
Western Consuming	-23,050	-33,161	-45,825	-42,743	-13,297	7,088
Total	**-322,196**	**-282,389**	**-365,130**	**-321,030**	**-58,694**	**154,718**

Notes: This table contains total net withdrawals for each State with natural gas storage facilities. Positive numbers indicate the volume of withdrawals in excess of injections. Negative values indicate the volume of injections in excess of withdrawals. Data through 1997 are final.All other data are preliminary at this time and are not considered final until publication of the *Natural Gas Annual* for that year. The American Gas Association (AGA) publishes weekly estimates of working gas levels in underground storage by region. AGA defines the Producing Region as Texas, Oklahoma, Kansas, New Mexico, Louisiana, Arkansas, and Mississippi; the Eastern Consuming Region as all States east of the Mississippi River less Mississippi, plus Iowa, Nebraska and Missouri; the Western Consuming Region as all States west of the Mississippi River less the Producing Region and Iowa, Nebraska and Missouri.

Source: Form EIA-191, "Monthly Underground Gas Storage Report."

Table 14. Activities of Underground Natural Gas Storage Operators, by State, March 1999

(Volumes in Million Cubic Feet)

State	Total Storage Capacity	Natural Gas in Underground Storage at End of Period			Change in Working Gas from Same Period Previous Year		Storage Activity	
		Base Gas	Working Gas	Total	Volume	Percent	Injections	Withdrawals
Alabama	3,280	1,190	376	1,566	39	11.5	14	326
Arkansas	24,191	7,460	3,690	11,150	1,041	39.3	0	690
California	396,430	247,961	114,166	362,127	42,929	60.3	4,958	14,740
Colorado	99,600	48,229	23,931	72,160	7,455	45.2	1,175	4,494
Illinois	898,565	651,473	88,357	739,831	-4,345	-4.7	4,079	31,658
Indiana	113,210	73,877	21,894	95,771	3,070	16.3	73	3,695
Iowa	271,200	200,300	8,073	208,373	-3,089	-27.7	223	5,393
Kansas	304,066	189,193	48,612	237,804	12,575	34.9	3,057	17,034
Kentucky	219,908	109,121	66,948	176,069	12,660	23.3	1,759	7,839
Louisiana	559,013	265,855	150,624	416,478	37,597	33.3	18,763	29,026
Maryland	62,000	46,677	6,251	52,928	786	14.4	889	2,097
Michigan	992,934	[a]460,768	[a]249,076	709,844	-7,945	-3.1	5,392	58,514
Minnesota	7,000	4,623	1,238	5,861	-72	-5.5	0	167
Mississippi	134,012	77,595	31,264	108,859	3,226	11.5	2,011	8,851
Missouri	31,274	21,600	8,608	30,208	53	0.6	553	703
Montana	371,510	167,362	35,838	203,200	-238	-0.7	710	3,120
Nebraska	39,469	31,507	741	32,248	-932	-55.7	1	1,339
New Mexico	96,600	27,131	7,044	34,175	1,122	18.9	647	1,589
New York	175,479	106,976	31,581	138,557	2,214	7.5	805	11,493
Ohio	573,434	351,694	34,180	385,874	4,472	15.1	226	33,924
Oklahoma	396,087	217,663	91,682	309,345	41,860	84.0	6,871	14,949
Oregon	11,623	6,834	2,276	9,110	-983	-30.2	0	1,185
Pennsylvania	684,842	354,143	132,490	486,633	1,741	1.3	9,618	53,641
Tennessee	1,200	340	452	792	170	59.9	0	80
Texas	683,891	251,765	198,060	449,825	70,769	55.6	16,949	31,101
Utah	121,980	64,601	15,651	80,253	7,407	89.8	972	6,710
Virginia	4,669	2,470	745	3,215	211	39.6	51	376
Washington	37,300	21,496	6,940	28,435	3,657	111.4	2,305	3,418
West Virginia	734,158	290,727	34,187	324,915	3,892	12.8	1,615	31,887
Wyoming	105,869	60,721	15,468	76,189	4,454	40.4	573	925
AGA Regions								
Producing	2,197,859	1,036,661	530,976	1,567,636	168,191	46.4	48,296	103,240
Eastern Consuming	4,805,622	2,702,863	683,960	3,386,824	13,814	2.1	25,298	242,966
Western Consuming	1,151,311	621,827	215,508	837,336	64,610	42.8	10,693	34,758
Total	**8,154,792**	**4,361,352**	**1,430,444**	**5,791,796**	**245,799**	**20.7**	**84,287**	**380,964**

[a] Reflects one respondent's reclassification of natual gas in underground storage from working gas to base gas.

Notes: Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. This is due to changes in the quantities of native gas included in base gas and/or losses in base gas due to migration from storage reservoirs. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia. The American Gas Association (AGA) publishes weekly estimates of working gas levels in underground storage by region. AGA defines the Producing Region as Texas, Oklahoma, Kansas, New Mexico, Louisiana, Arkansas, and Mississippi; the Eastern Consuming Region as all States east of the Mississippi River less Mississippi, plus Iowa, Nebraska and Missouri; the Western Consuming Region as all States west of the Mississippi River less the Producing Region and Iowa, Nebraska and Missouri.

Source: Form EIA-191, "Monthly Underground Gas Storage Report."

Table 15

Table 15. Natural Gas Deliveries to Residential Consumers, by State, 1997-1999

(Million Cubic Feet)

State	YTD 1999	YTD 1998	YTD 1997	1999		1998
				February	January	Total
Alabama	15,679	18,911	18,451	6,364	9,316	46,655
Alaska	4,892	3,956	3,867	2,223	2,668	15,617
Arizona	11,723	12,707	11,033	5,368	6,355	35,815
Arkansas	14,347	12,004	16,022	5,259	9,087	35,756
California	166,356	158,512	139,542	77,987	88,370	549,885
Colorado	37,595	35,036	36,049	15,399	22,196	NA
Connecticut	13,187	11,848	12,958	6,082	7,104	35,704
Delaware	3,028	2,768	3,179	1,469	1,560	7,810
District of Columbia	5,224	4,774	5,363	2,309	2,915	13,189
Florida	3,718	4,721	3,821	1,555	2,163	15,252
Georgia	29,773	38,197	37,737	13,082	16,692	106,238
Hawaii	96	108	100	48	49	550
Idaho	5,724	5,207	5,102	2,633	3,090	15,975
Illinois	155,224	131,563	169,369	61,438	93,786	405,461
Indiana	NA	47,536	58,668	NA	NA	NA
Iowa	26,783	23,821	29,621	10,656	16,128	68,912
Kansas	NA	29,418	25,453	NA	NA	84,208
Kentucky	20,830	19,133	22,950	8,779	12,050	55,894
Louisiana	16,171	17,264	19,064	5,999	10,171	NA
Maine	298	276	299	133	165	928
Maryland	NA	23,660	25,941	NA	13,320	NA
Massachusetts	NA	32,592	35,244	NA	NA	NA
Michigan	120,856	105,613	124,559	52,119	68,737	317,329
Minnesota	42,520	36,626	45,200	17,096	25,424	110,578
Mississippi	NA	NA	10,081	4,022	NA	NA
Missouri	44,724	41,345	48,603	18,523	26,201	110,375
Montana	5,998	5,822	6,890	2,519	3,479	NA
Nebraska	14,517	14,544	17,513	5,949	8,568	40,703
Nevada	9,294	9,175	8,333	4,332	4,962	30,023
New Hampshire	2,282	2,150	2,197	1,036	1,246	NA
New Jersey	NA	60,113	69,922	NA	NA	NA
New Mexico	14,694	12,221	13,037	4,896	9,799	35,614
New York	NA	100,039	118,022	NA	NA	NA
North Carolina	18,725	20,513	20,014	7,495	11,230	50,318
North Dakota	3,885	3,472	4,190	1,565	2,320	10,290
Ohio	108,356	94,438	116,043	49,194	59,162	NA
Oklahoma	24,454	25,425	26,627	9,465	14,989	65,403
Oregon	11,781	10,698	10,799	5,445	6,336	NA
Pennsylvania	78,092	66,241	87,113	34,404	43,687	NA
Rhode Island	5,745	5,500	5,781	2,662	3,083	NA
South Carolina	9,284	10,609	10,196	3,591	5,693	25,316
South Dakota	4,235	3,861	4,824	1,719	2,516	11,649
Tennessee	24,103	NA	24,714	8,917	15,186	NA
Texas	67,020	75,296	84,416	23,882	43,138	200,728
Utah	15,945	16,589	18,245	7,725	8,220	56,731
Vermont	883	824	835	387	496	2,454
Virginia	24,111	22,613	24,717	11,220	12,891	63,029
Washington	NA	NA	16,260	NA	NA	NA
West Virginia	11,140	9,945	11,481	4,936	6,204	NA
Wisconsin	43,390	37,706	45,501	16,833	26,556	116,373
Wyoming	3,603	NA	3,918	1,674	1,929	NA
Total	**1,580,592**	**1,490,953**	**1,659,856**	**672,844**	**907,748**	**4,481,500**

See footnotes at end of table.

Table 15. Natural Gas Deliveries to Residential Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1998					
	December	November	October	September	August	July
Alabama	4,534	2,493	1,324	1,196	1,183	1,202
Alaska	2,183	1,858	1,346	818	648	479
Arizona	4,624	1,990	1,122	932	894	1,062
Arkansas	4,917	2,957	1,366	1,067	1,058	1,146
California	68,820	40,193	26,155	22,034	21,621	25,147
Colorado	14,198	8,454	4,185	2,690	2,480	NA
Connecticut	4,490	3,259	1,532	937	848	1,028
Delaware	901	575	232	177	165	197
District of Columbia	1,541	1,084	457	338	327	371
Florida	1,397	935	718	626	639	707
Georgia	14,775	9,306	4,268	2,851	2,814	2,956
Hawaii	44	40	40	41	41	45
Idaho	2,434	1,507	656	316	292	402
Illinois	64,039	43,854	21,530	10,513	10,437	9,497
Indiana	NA	13,244	6,355	NA	NA	NA
Iowa	10,511	6,343	3,029	1,435	1,453	1,622
Kansas	10,495	6,968	2,780	1,771	1,851	2,090
Kentucky	9,366	6,142	2,239	1,167	1,104	1,321
Louisiana	4,941	2,678	NA	1,703	1,574	1,774
Maine	132	95	62	27	25	22
Maryland	9,252	6,554	NA	NA	1,854	1,828
Massachusetts	NA	NA	4,257	NA	2,347	2,842
Michigan	42,050	29,476	15,851	7,533	6,740	7,275
Minnesota	18,670	12,214	5,328	2,683	2,465	2,537
Mississippi	2,509	1,545	815	711	705	714
Missouri	13,831	8,075	3,345	2,619	2,185	2,670
Montana	2,942	2,079	1,272	484	488	481
Nebraska	4,223	3,404	1,632	885	1,036	1,014
Nevada	4,335	2,526	1,367	824	813	977
New Hampshire	739	597	294	159	NA	169
New Jersey	NA	NA	8,124	NA	4,528	4,845
New Mexico	7,289	3,545	1,169	840	845	822
New York	NA	NA	NA	NA	7,468	15,038
North Carolina	5,679	4,022	1,205	963	905	1,044
North Dakota	1,455	1,036	484	202	208	235
Ohio	42,817	29,741	16,127	5,905	7,246	NA
Oklahoma	7,678	4,327	1,780	1,494	1,430	1,633
Oregon	5,504	3,150	1,431	760	679	944
Pennsylvania	27,675	19,152	10,155	NA	NA	5,283
Rhode Island	1,883	1,408	645	436	438	462
South Carolina	2,858	1,754	606	491	463	474
South Dakota	1,669	1,157	533	248	227	274
Tennessee	8,358	4,525	1,492	1,172	1,111	1,186
Texas	28,481	13,025	7,370	5,930	5,810	6,077
Utah	9,826	5,808	4,463	1,913	1,332	1,264
Vermont	289	213	102	114	57	56
Virginia	8,989	5,980	2,478	1,443	1,064	1,425
Washington	NA	NA	NA	NA	NA	NA
West Virginia	3,895	NA	1,302	NA	NA	NA
Wisconsin	18,698	11,803	6,382	2,723	2,768	2,415
Wyoming	1,578	NA	745	388	298	NA
Total	**613,452**	**389,640**	**200,270**	**119,590**	**115,277**	**130,370**

See footnotes at end of table.

Table 15

Table 15. Natural Gas Deliveries to Residential Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1998					
	June	May	April	March	February	January
Alabama	1,386	2,335	4,610	7,480	9,222	9,689
Alaska	628	933	1,239	1,529	1,716	2,240
Arizona	1,375	2,092	3,694	5,323	5,604	7,103
Arkansas	1,171	1,731	2,270	6,069	6,668	5,336
California	33,207	38,118	54,072	62,006	76,210	82,302
Colorado	1,592	7,546	11,118	15,570	16,176	18,860
Connecticut	1,195	1,878	3,638	5,051	5,585	6,263
Delaware	252	450	846	1,248	1,360	1,408
District of Columbia	435	636	1,195	2,032	2,365	2,409
Florida	817	1,017	1,631	2,044	2,251	2,470
Georgia	3,186	3,558	8,015	16,312	18,031	20,167
Hawaii	47	47	49	49	52	55
Idaho	666	904	1,560	2,032	2,232	2,975
Illinois	11,529	14,790	33,014	54,697	53,146	78,417
Indiana	3,291	5,270	NA	23,358	20,668	26,868
Iowa	1,435	2,807	5,821	10,634	10,261	13,560
Kansas	2,512	4,451	8,389	13,482	13,593	15,826
Kentucky	1,360	1,961	3,937	8,164	8,515	10,618
Louisiana	1,814	2,310	3,736	7,184	7,953	9,311
Maine	31	45	92	120	124	153
Maryland	2,087	2,992	5,696	9,577	11,052	12,609
Massachusetts	NA	NA	10,697	14,514	15,644	16,948
Michigan	9,771	13,888	31,736	47,397	48,977	56,636
Minnesota	2,735	3,836	7,148	16,337	15,023	21,603
Mississippi	796	1,231	2,243	NA	4,564	NA
Missouri	3,128	4,980	10,435	17,763	18,966	22,378
Montana	1,086	NA	1,676	2,429	2,404	3,418
Nebraska	1,199	1,961	4,324	6,482	6,642	7,902
Nevada	1,487	1,884	2,826	3,809	4,149	5,025
New Hampshire	238	378	697	845	1,010	1,140
New Jersey	5,736	11,735	17,514	26,429	29,313	30,800
New Mexico	284	1,270	2,589	4,740	4,337	7,884
New York	NA	NA	30,102	42,752	46,717	53,322
North Carolina	1,192	2,243	5,018	7,535	9,710	10,803
North Dakota	292	490	953	1,464	1,561	1,910
Ohio	8,509	11,550	24,861	44,211	43,910	50,527
Oklahoma	1,855	3,094	5,854	10,832	11,652	13,774
Oregon	1,641	2,135	NA	NA	4,581	6,117
Pennsylvania	6,505	9,880	NA	32,526	34,714	31,526
Rhode Island	622	1,001	NA	2,402	2,720	2,781
South Carolina	562	1,071	2,421	4,006	5,177	5,432
South Dakota	302	512	1,127	1,738	1,666	2,196
Tennessee	1,410	2,674	5,170	9,938	9,546	NA
Texas	6,125	9,148	15,463	28,005	34,096	41,199
Utah	1,958	2,243	4,853	6,482	8,193	8,396
Vermont	77	118	266	340	397	427
Virginia	1,737	2,509	5,172	9,618	11,067	11,546
Washington	NA	NA	NA	NA	NA	NA
West Virginia	NA	NA	2,785	4,553	4,906	5,039
Wisconsin	3,470	4,080	9,198	17,130	15,618	22,087
Wyoming	503	704	1,182	1,566	1,560	NA
Total	**152,827**	**220,677**	**407,761**	**640,684**	**685,125**	**805,828**

See footnotes at end of table.

Table 15. Natural Gas Deliveries to Residential Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1997					
	Total	December	November	October	September	August
Alabama	48,496	7,942	3,977	1,440	1,254	1,242
Alaska	15,146	2,162	1,684	1,569	743	418
Arizona	31,057	4,764	1,973	1,053	1,124	907
Arkansas	42,428	6,369	4,013	1,345	948	917
California	478,904	68,486	39,940	24,538	21,448	20,643
Colorado	115,583	17,463	10,147	4,290	2,714	2,590
Connecticut	40,562	5,977	3,672	1,629	1,014	914
Delaware	8,972	1,213	671	252	184	179
District of Columbia	15,807	2,421	1,414	553	393	372
Florida	13,117	1,837	1,074	681	631	670
Georgia	114,383	19,892	16,495	6,693	3,158	2,930
Hawaii	517	45	42	39	40	41
Idaho	15,239	2,371	1,427	638	320	294
Illinois	497,230	69,718	56,299	29,455	11,690	10,102
Indiana	169,140	25,914	17,338	7,954	3,467	2,968
Iowa	81,696	12,051	8,606	4,048	1,646	1,479
Kansas	69,415	10,323	8,236	2,153	1,485	1,469
Kentucky	66,033	11,175	8,091	3,063	1,451	1,073
Louisiana	52,709	7,960	4,176	2,016	1,710	1,716
Maine	1,009	142	107	66	30	26
Maryland	77,500	11,130	7,894	3,543	2,067	1,799
Massachusetts	112,308	15,677	10,149	4,784	2,557	2,484
Michigan	379,838	50,037	37,942	17,853	8,775	7,269
Minnesota	128,873	17,435	15,098	6,504	2,542	2,234
Mississippi	27,626	4,355	2,561	902	778	761
Missouri	127,625	19,041	12,090	3,656	2,623	2,401
Montana	21,002	3,207	2,038	1,234	510	449
Nebraska	47,105	5,787	4,399	1,382	936	939
Nevada	25,243	3,884	1,925	1,024	805	781
New Hampshire	6,939	933	616	327	165	155
New Jersey	216,925	31,134	20,208	9,250	5,397	4,726
New Mexico	36,623	8,217	4,095	1,217	836	849
New York	375,641	48,074	34,936	17,385	9,878	10,267
North Carolina	52,894	9,202	4,875	1,438	934	898
North Dakota	11,370	1,423	1,133	434	191	168
Ohio	354,543	50,352	36,474	19,056	7,124	6,112
Oklahoma	71,762	11,025	6,186	1,968	1,549	1,521
Oregon	32,522	4,684	2,713	1,536	829	758
Pennsylvania	262,494	37,709	26,561	12,927	6,214	5,236
Rhode Island	18,162	2,509	1,464	659	473	443
South Carolina	25,741	4,683	2,424	637	471	449
South Dakota	13,203	1,734	1,339	537	261	233
Tennessee	64,130	11,511	6,602	1,829	1,182	1,075
Texas	234,988	37,410	21,561	9,175	7,140	6,789
Utah	58,108	10,376	6,018	4,299	1,957	1,466
Vermont	2,631	345	214	118	59	52
Virginia	73,905	12,127	7,452	2,989	1,630	1,467
Washington	61,813	11,405	7,594	3,623	2,002	1,791
West Virginia	35,996	6,017	4,061	1,737	776	598
Wisconsin	135,819	19,045	16,127	8,106	2,957	2,535
Wyoming	12,999	2,337	1,179	617	320	245
Total	**4,983,772**	**731,030**	**497,310**	**234,223**	**129,388**	**117,900**

NA Not Available.

Notes: Geographic coverage is the 50 States and the District of Columbia. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 16

Table 16. Natural Gas Deliveries to Commercial Consumers, by State, 1997-1999

(Million Cubic Feet)

State	YTD 1999	YTD 1998	YTD 1997	1999		1998
				February	January	Total
Alabama	6,890	8,539	8,378	3,007	3,884	27,983
Alaska	6,016	5,224	5,865	2,894	3,122	23,455
Arizona	7,450	7,663	7,373	3,569	3,880	31,754
Arkansas	9,034	8,856	9,840	3,503	5,531	NA
California	68,029	59,245	51,739	31,671	36,358	319,553
Colorado	19,953	19,666	21,187	8,906	11,048	NA
Connecticut	12,631	11,297	11,194	6,038	6,594	42,471
Delaware	1,982	1,834	2,103	944	1,038	5,624
District of Columbia	5,034	4,924	4,651	2,549	2,486	17,184
Florida	8,125	8,136	7,782	3,797	4,328	38,240
Georgia	12,941	16,591	16,549	5,786	7,155	55,578
Hawaii	375	376	336	191	185	2,119
Idaho	3,809	3,546	3,599	1,734	2,076	11,718
Illinois	61,386	52,989	66,269	26,221	35,165	176,571
Indiana	NA	23,335	25,921	NA	NA	NA
Iowa	15,045	13,900	17,175	6,162	8,883	44,299
Kansas	NA	15,882	12,521	NA	NA	50,545
Kentucky	11,294	10,721	12,569	4,940	6,354	33,883
Louisiana	6,275	9,509	7,345	2,692	3,584	NA
Maine	795	764	780	341	454	NA
Maryland	NA	15,227	13,894	NA	9,129	56,238
Massachusetts	NA	26,659	28,336	NA	NA	NA
Michigan	56,459	49,583	59,631	25,441	31,019	164,836
Minnesota	28,950	26,391	29,068	12,605	16,345	84,104
Mississippi	NA	6,574	6,318	2,934	NA	23,170
Missouri	22,187	20,611	25,211	9,713	12,474	61,869
Montana	3,665	3,637	4,464	1,550	2,115	NA
Nebraska	10,044	9,140	8,639	4,246	5,798	28,214
Nevada	5,389	5,653	5,369	2,486	2,903	23,049
New Hampshire	2,382	2,218	2,232	1,070	1,312	NA
New Jersey	NA	38,912	39,911	NA	NA	NA
New Mexico	10,150	9,169	9,776	4,322	5,827	30,824
New York	NA	NA	75,759	NA	NA	NA
North Carolina	12,688	12,285	11,712	6,309	6,380	37,774
North Dakota	3,641	3,187	3,782	1,558	2,083	10,290
Ohio	54,780	51,037	59,757	26,480	28,299	NA
Oklahoma	13,910	14,828	15,058	5,832	8,077	45,044
Oregon	8,434	7,198	7,723	3,880	4,554	NA
Pennsylvania	42,033	41,245	41,391	20,975	21,058	NA
Rhode Island	3,579	3,406	3,439	1,686	1,892	NA
South Carolina	5,184	5,736	4,759	2,232	2,952	19,887
South Dakota	3,216	2,913	3,651	1,343	1,873	9,274
Tennessee	16,254	NA	18,328	6,648	9,606	NA
Texas	46,310	45,106	49,147	18,878	27,433	215,604
Utah	8,778	8,778	9,524	4,198	4,580	30,853
Vermont	783	923	921	321	462	2,979
Virginia	17,024	17,071	16,700	8,062	8,962	59,729
Washington	NA	NA	10,919	NA	NA	NA
West Virginia	7,168	6,874	7,467	3,286	3,882	NA
Wisconsin	28,868	22,533	27,034	11,927	16,941	81,410
Wyoming	2,480	NA	2,883	1,124	1,356	NA
Total	**874,391**	**840,909**	**895,980**	**393,808**	**480,584**	**3,052,880**

See footnotes at end of table.

Table 16. Natural Gas Deliveries to Commercial Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1998					
	December	November	October	September	August	July
Alabama	2,355	1,676	1,228	1,053	981	1,030
Alaska	2,974	2,331	2,012	1,396	1,208	1,190
Arizona	3,376	2,343	1,902	1,730	1,721	1,890
Arkansas	4,272	3,070	2,435	2,129	2,218	2,253
California	35,388	30,954	26,720	26,660	30,322	27,131
Colorado	7,986	5,059	3,413	2,714	2,329	NA
Connecticut	4,991	3,256	2,686	2,039	2,178	2,456
Delaware	626	446	243	179	176	190
District of Columbia	1,752	1,209	883	837	847	871
Florida	3,369	2,852	2,656	2,501	2,575	2,630
Georgia	5,541	4,110	3,073	2,612	2,649	2,757
Hawaii	185	173	162	171	187	169
Idaho	1,642	1,047	581	388	381	407
Illinois	24,720	17,234	10,112	7,349	6,672	5,951
Indiana	NA	7,162	4,358	NA	2,446	NA
Iowa	5,999	4,257	2,406	1,194	1,199	1,353
Kansas	5,585	3,672	1,929	1,626	2,077	2,201
Kentucky	4,924	3,368	1,705	1,143	1,134	1,061
Louisiana	2,697	2,174	NA	1,829	1,913	1,799
Maine	337	NA	165	78	74	75
Maryland	6,716	3,487	3,296	2,827	3,079	2,927
Massachusetts	NA	NA	5,288	NA	3,407	4,054
Michigan	20,702	15,353	8,819	5,790	5,841	5,301
Minnesota	12,694	8,931	5,382	2,747	2,311	2,026
Mississippi	2,318	1,624	1,242	1,445	1,304	1,371
Missouri	7,156	4,410	2,395	2,195	3,039	2,210
Montana	1,819	1,262	789	407	405	400
Nebraska	3,910	1,935	1,018	935	848	1,070
Nevada	2,528	1,822	1,288	1,090	1,052	1,304
New Hampshire	810	323	371	222	NA	228
New Jersey	NA	NA	NA	NA	6,079	6,385
New Mexico	4,613	2,533	1,410	1,242	1,214	1,174
New York	NA	NA	NA	NA	15,604	12,007
North Carolina	4,006	2,870	1,867	1,678	1,650	1,502
North Dakota	1,390	1,042	558	329	354	285
Ohio	21,958	14,908	NA	4,919	4,070	NA
Oklahoma	5,604	2,911	1,813	1,756	1,812	1,837
Oregon	3,630	2,689	1,296	1,028	905	1,047
Pennsylvania	15,512	11,849	6,876	4,436	NA	4,607
Rhode Island	1,308	996	613	472	195	484
South Carolina	1,940	1,531	1,148	1,055	1,019	1,013
South Dakota	1,306	914	363	269	263	283
Tennessee	6,190	4,239	2,688	2,527	2,366	2,507
Texas	26,376	18,725	14,888	16,529	16,063	18,195
Utah	4,903	3,182	2,078	1,026	840	845
Vermont	401	276	165	125	100	102
Virginia	7,141	5,371	3,304	2,561	1,971	2,739
Washington	NA	NA	NA	NA	NA	NA
West Virginia	2,880	2,667	1,933	1,622	1,575	5,166
Wisconsin	11,696	8,101	4,339	3,346	3,410	3,063
Wyoming	1,708	NA	461	324	232	NA
Total	**369,647**	**262,549**	**177,646**	**147,861**	**151,844**	**153,782**

See footnotes at end of table.

Table 16. Natural Gas Deliveries to Commercial Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1998					
	June	May	April	March	February	January
Alabama	1,118	3,768	2,713	3,522	4,010	4,529
Alaska	1,274	1,684	1,911	2,251	2,340	2,883
Arizona	2,073	2,495	3,013	3,548	3,534	4,129
Arkansas	NA	1,432	1,728	3,843	4,075	4,781
California	18,132	22,410	23,269	19,321	28,787	30,457
Colorado	3,415	4,768	6,738	9,008	9,159	10,507
Connecticut	2,151	2,124	4,294	4,999	5,540	5,757
Delaware	226	320	556	829	899	935
District of Columbia	913	1,085	1,830	2,032	2,382	2,542
Florida	2,748	3,112	3,701	3,961	3,984	4,152
Georgia	2,725	3,248	4,882	7,391	8,120	8,471
Hawaii	181	169	174	172	179	196
Idaho	537	689	1,077	1,423	1,570	1,977
Illinois	6,702	6,961	15,326	22,556	22,455	30,533
Indiana	NA	3,258	8,420	11,063	10,460	12,876
Iowa	1,237	1,566	3,605	7,584	5,962	7,938
Kansas	1,980	2,493	3,888	9,214	7,252	8,630
Kentucky	1,195	1,505	2,490	4,636	5,053	5,668
Louisiana	NA	1,629	2,048	5,056	4,998	4,511
Maine	90	122	255	332	342	422
Maryland	3,155	3,514	4,885	7,125	7,365	7,862
Massachusetts	5,209	5,789	8,771	11,570	12,943	13,716
Michigan	6,297	8,530	15,784	22,837	23,664	25,919
Minnesota	3,003	3,208	5,685	11,726	11,133	15,257
Mississippi	1,298	1,339	1,789	2,866	3,310	3,264
Missouri	2,352	2,978	5,545	8,978	9,467	11,144
Montana	839	NA	1,029	1,527	1,459	2,178
Nebraska	856	1,690	2,786	4,027	4,237	4,903
Nevada	1,587	1,876	2,207	2,642	2,575	3,078
New Hampshire	NA	375	710	869	1,051	1,167
New Jersey	6,873	10,233	11,748	19,826	18,713	20,200
New Mexico	1,096	1,832	2,727	3,814	3,839	5,330
New York	13,919	NA	20,716	NA	NA	NA
North Carolina	1,658	2,053	3,326	4,879	5,791	6,495
North Dakota	312	507	953	1,372	1,434	1,753
Ohio	5,165	7,134	13,211	21,443	23,991	27,046
Oklahoma	1,826	2,291	4,018	6,347	6,859	7,969
Oregon	1,428	1,618	NA	NA	3,308	3,889
Pennsylvania	4,906	6,114	NA	17,790	19,674	21,571
Rhode Island	495	680	NA	1,492	1,620	1,786
South Carolina	1,063	1,209	1,732	2,440	2,781	2,955
South Dakota	285	539	806	1,335	1,292	1,621
Tennessee	2,646	2,993	4,714	7,027	6,063	NA
Texas	11,161	13,616	14,839	20,104	20,826	24,280
Utah	1,154	1,510	2,749	3,787	4,235	4,544
Vermont	110	116	281	381	436	487
Virginia	2,682	3,672	5,338	7,878	8,398	8,673
Washington	NA	NA	NA	NA	NA	NA
West Virginia	NA	1,709	2,235	3,146	3,310	3,564
Wisconsin	3,471	3,801	6,632	11,019	9,845	12,688
Wyoming	409	545	861	1,128	1,288	NA
Total	**144,003**	**176,612**	**257,019**	**371,006**	**391,793**	**449,117**

See footnotes at end of table.

Table 16. Natural Gas Deliveries to Commercial Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1997					
	Total	December	November	October	September	August
Alabama	32,362	3,743	2,437	1,903	2,075	2,622
Alaska	26,908	3,147	2,658	2,574	1,594	1,340
Arizona	30,284	3,381	2,269	1,751	1,836	1,767
Arkansas	29,443	3,989	2,713	1,347	1,129	1,128
California	256,044	26,978	21,157	19,602	18,459	18,696
Colorado	69,088	9,717	6,177	2,558	2,372	2,118
Connecticut	42,680	5,801	3,854	2,512	1,566	1,762
Delaware	6,610	845	513	286	245	186
District of Columbia	18,018	2,374	1,354	899	852	853
Florida	36,765	3,719	3,112	2,621	2,495	2,589
Georgia	57,227	8,027	6,140	3,554	2,719	2,597
Hawaii	1,751	165	37	152	148	143
Idaho	11,469	1,657	982	585	411	356
Illinois	202,871	27,076	22,863	12,292	6,426	5,809
Indiana	81,813	10,689	8,637	4,518	2,175	2,070
Iowa	50,194	7,208	5,707	3,037	1,359	1,114
Kansas	41,238	5,532	3,673	1,936	1,567	1,999
Kentucky	38,632	6,154	4,176	2,417	1,249	948
Louisiana	25,629	3,073	2,048	1,414	1,353	1,307
Maine	2,713	375	289	176	91	78
Maryland	49,859	6,536	4,962	2,839	2,283	2,070
Massachusetts	105,818	11,523	8,546	6,898	5,365	5,635
Michigan	192,300	25,857	19,047	9,791	5,997	5,688
Minnesota	92,263	12,318	10,721	5,179	2,408	2,369
Mississippi	22,073	2,934	2,028	1,224	924	1,309
Missouri	69,869	9,547	6,192	2,741	2,195	2,063
Montana	13,926	2,014	1,306	797	425	385
Nebraska	33,853	3,454	2,812	1,855	1,477	2,295
Nevada	22,024	2,580	1,806	1,276	1,198	1,151
New Hampshire	7,489	1,010	703	411	249	217
New Jersey	168,761	23,161	16,022	8,454	7,142	6,699
New Mexico	31,501	4,831	2,949	1,384	1,206	1,185
New York	321,447	34,705	27,141	21,151	17,307	18,574
North Carolina	38,021	5,508	3,434	1,908	1,713	1,592
North Dakota	10,875	1,339	1,129	559	317	264
Ohio	184,103	25,092	17,752	9,727	4,948	4,355
Oklahoma	45,195	6,049	3,675	2,064	1,764	1,733
Oregon	25,500	3,352	2,023	1,367	1,026	915
Pennsylvania	144,134	19,731	14,064	9,348	5,000	4,248
Rhode Island	12,306	1,413	1,212	637	460	399
South Carolina	19,561	2,638	1,757	1,167	1,884	1,004
South Dakota	10,426	1,311	1,021	549	334	249
Tennessee	55,130	7,939	5,015	2,653	2,078	1,921
Texas	216,347	24,323	19,327	14,189	14,479	14,856
Utah	31,257	5,152	3,187	2,020	1,124	943
Vermont	3,051	403	282	184	108	80
Virginia	61,932	9,233	5,543	3,397	2,334	2,476
Washington	46,802	6,666	7,903	2,660	2,041	1,625
West Virginia	25,918	3,386	2,809	1,500	1,106	1,137
Wisconsin	88,783	12,473	10,180	5,408	2,738	2,806
Wyoming	10,767	1,077	967	555	316	287
Total	**3,223,030**	**411,204**	**306,311**	**190,027**	**142,068**	**140,017**

NA Not Available.

Notes: Geographic coverage is the 50 States and the District of Columbia. Gas volumes delivered for use as vehicle fuel are included in the annual total but not in the monthly components. See Appendix A,Explanatory Note 5 for discussion of computations and revision policy. In 1996, consumption of natural gas for agricultural use is classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use. See Explanatory Note 5 for further explanation.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 17

Table 17. Natural Gas Deliveries to Industrial Consumers, by State, 1997-1999

(Million Cubic Feet)

State	YTD 1999	YTD 1998	YTD 1997	1999		1998
				February	January	Total
Alabama	34,534	34,923	34,055	17,325	17,209	200,231
Alaska	11,825	12,606	13,490	5,521	6,304	NA
Arizona	4,651	4,759	4,365	2,291	2,360	28,209
Arkansas	24,738	25,453	26,088	11,668	13,070	142,774
California	127,923	131,540	116,517	65,298	62,625	729,514
Colorado	11,774	13,337	13,428	7,170	4,603	NA
Connecticut	5,942	6,551	6,102	2,957	2,985	32,455
Delaware	3,766	3,048	2,421	1,878	1,887	16,137
District of Columbia	0	0	0	0	0	0
Florida	21,510	23,984	21,745	10,403	11,107	138,914
Georgia	23,767	27,143	33,067	11,713	12,054	151,146
Hawaii	0	0	0	0	0	0
Idaho [a]	5,882	6,826	5,968	3,081	2,802	34,263
Illinois	63,608	61,927	64,993	29,448	34,159	306,290
Indiana	NA	54,704	57,686	NA	NA	NA
Iowa	21,495	20,836	19,832	9,611	11,884	110,576
Kansas	NA	23,306	20,134	NA	NA	NA
Kentucky	NA	17,390	19,328	8,168	NA	91,604
Louisiana	158,019	157,427	163,105	74,099	83,920	NA
Maine	398	366	342	104	293	NA
Maryland	NA	5,833	9,126	NA	4,310	37,610
Massachusetts	NA	18,366	19,738	NA	NA	NA
Michigan	55,841	65,360	69,951	26,741	29,100	301,398
Minnesota	22,080	19,215	19,704	11,213	10,867	99,663
Mississippi	NA	NA	15,062	6,900	NA	NA
Missouri	NA	13,408	16,846	NA	6,624	67,138
Montana	3,403	3,333	3,770	1,614	1,790	17,548
Nebraska	6,127	6,382	8,872	2,695	3,432	35,684
Nevada	5,690	3,572	4,705	2,674	3,016	28,532
New Hampshire	1,010	978	855	484	526	NA
New Jersey	NA	36,634	38,481	NA	NA	NA
New Mexico	NA	6,149	7,770	4,870	NA	40,139
New York	NA	NA	56,116	NA	NA	NA
North Carolina	17,992	21,157	19,410	8,025	9,967	115,082
North Dakota	4,278	3,916	3,725	2,844	1,434	20,912
Ohio	65,373	67,691	68,123	31,901	33,472	NA
Oklahoma	28,873	33,628	37,833	14,203	14,670	191,012
Oregon	18,257	18,504	15,315	8,854	9,403	NA
Pennsylvania	45,676	42,926	46,713	23,816	21,860	231,500
Rhode Island	3,762	4,183	4,124	1,728	2,033	NA
South Carolina	17,161	18,773	16,037	8,284	8,877	104,878
South Dakota	1,008	1,065	1,668	463	545	5,510
Tennessee	25,786	NA	24,934	12,593	13,193	NA
Texas	326,570	317,996	350,783	157,475	169,095	NA
Utah	7,054	8,815	7,482	3,350	3,703	45,366
Vermont	532	427	377	312	220	2,105
Virginia	12,996	14,191	15,429	7,364	5,632	94,436
Washington	NA	NA	17,615	NA	NA	NA
West Virginia	7,846	9,713	9,252	3,705	4,141	NA
Wisconsin	32,626	29,635	33,528	14,720	17,907	140,446
Wyoming	NA	NA	8,796	NA	4,359	NA
Total	**1,486,883**	**1,523,769**	**1,574,807**	**719,991**	**766,893**	**8,561,122**

See footnotes at end of table.

Table 17. Natural Gas Deliveries to Industrial Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1998					
	December	November	October	September	August	July
Alabama	15,857	15,118	16,251	15,399	17,248	16,167
Alaska	NA	NA	NA	NA	NA	6,542
Arizona	2,609	2,384	2,522	2,078	2,508	2,307
Arkansas	11,580	10,647	11,070	11,836	11,799	11,321
California	64,279	60,200	61,870	65,490	64,310	59,188
Colorado	6,739	5,399	4,683	4,230	5,294	NA
Connecticut	2,815	2,641	2,571	2,417	2,455	2,271
Delaware	1,522	1,415	1,412	1,182	1,221	1,097
District of Columbia	0	0	0	0	0	0
Florida	11,116	11,473	10,774	11,553	10,827	11,384
Georgia	12,615	13,015	11,895	8,274	13,484	12,768
Hawaii	0	0	0	0	0	0
Idaho [a]	2,632	2,799	2,712	2,701	2,530	2,620
Illinois	29,103	28,080	25,507	21,840	20,413	20,256
Indiana	28,078	NA	NA	NA	NA	NA
Iowa	9,466	9,960	9,295	7,469	7,741	7,647
Kansas	NA	13,258	12,280	9,502	13,725	15,481
Kentucky	8,188	7,950	7,705	6,695	6,702	6,738
Louisiana	95,190	71,246	NA	84,209	85,378	80,693
Maine	201	NA	224	190	179	153
Maryland	3,483	2,959	3,650	3,040	3,017	2,988
Massachusetts	NA	8,152	8,006	NA	8,134	7,812
Michigan	26,840	25,540	22,636	18,483	17,707	18,191
Minnesota	9,222	9,226	8,990	4,187	8,677	7,803
Mississippi	6,841	6,278	6,419	7,663	NA	NA
Missouri	5,897	4,744	5,194	4,581	5,185	5,697
Montana	1,771	1,563	1,400	1,206	1,126	1,215
Nebraska	2,255	2,361	2,673	786	4,050	5,853
Nevada	2,986	2,730	2,836	1,793	2,739	2,458
New Hampshire	484	NA	555	476	NA	438
New Jersey	NA	NA	NA	NA	15,840	15,601
New Mexico	3,636	3,439	3,627	3,805	3,556	3,536
New York	NA	NA	NA	NA	NA	NA
North Carolina	9,524	9,456	9,423	8,986	9,283	8,561
North Dakota	1,840	1,712	1,110	1,655	1,625	1,522
Ohio	31,615	28,292	27,630	24,368	23,492	NA
Oklahoma	12,040	12,518	17,337	19,543	18,236	16,672
Oregon	9,024	8,625	8,988	8,452	8,883	8,185
Pennsylvania	21,066	18,945	18,082	17,892	17,882	17,111
Rhode Island	2,179	2,165	2,196	1,963	2,126	2,121
South Carolina	9,241	9,092	8,837	8,475	8,389	7,613
South Dakota	573	554	294	411	440	416
Tennessee	12,892	12,705	13,618	12,499	12,815	11,939
Texas	210,615	187,889	NA	151,722	164,970	181,812
Utah	3,830	3,533	3,432	3,192	3,040	3,424
Vermont	202	181	179	154	135	153
Virginia	7,488	7,847	8,947	8,135	9,453	9,466
Washington	NA	NA	NA	NA	NA	NA
West Virginia	4,262	NA	2,618	NA	NA	232
Wisconsin	14,588	12,952	11,284	9,610	9,221	7,967
Wyoming	4,641	4,510	4,318	3,897	NA	NA
Total	**791,597**	**721,590**	**704,247**	**665,728**	**694,166**	**690,962**

See footnotes at end of table.

Table 17. Natural Gas Deliveries to Industrial Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1998					
	June	May	April	March	February	January
Alabama	16,737	17,308	17,013	18,208	16,441	18,483
Alaska	6,251	5,854	6,455	6,878	6,152	6,454
Arizona	2,034	2,313	2,281	2,413	2,226	2,533
Arkansas	11,102	11,839	12,765	13,363	12,114	13,339
California	53,880	66,080	55,492	47,185	67,501	64,039
Colorado	NA	5,649	6,278	6,323	6,388	6,949
Connecticut	2,225	2,546	2,782	3,183	3,149	3,402
Delaware	1,160	1,256	1,348	1,477	1,443	1,604
District of Columbia	0	0	0	0	0	0
Florida	11,469	11,765	11,608	12,960	11,053	12,931
Georgia	13,149	12,501	12,866	13,434	13,335	13,808
Hawaii	0	0	0	0	0	0
Idaho [a]	2,672	2,593	3,047	3,130	3,482	3,344
Illinois	20,738	22,462	26,752	29,211	28,719	33,208
Indiana	23,465	23,136	25,124	27,772	25,847	28,857
Iowa	7,613	8,097	10,660	11,792	9,516	11,321
Kansas	12,763	11,091	10,661	11,559	10,398	12,908
Kentucky	6,787	7,022	7,543	8,884	7,550	9,839
Louisiana	73,666	75,577	77,970	81,959	74,500	82,928
Maine	184	168	122	159	164	202
Maryland	2,935	3,002	3,094	3,607	2,764	3,069
Massachusetts	NA	7,635	8,209	8,759	8,443	9,923
Michigan	22,705	25,012	26,873	32,052	31,380	33,980
Minnesota	7,855	6,901	8,548	9,039	10,044	9,171
Mississippi	NA	NA	NA	NA	6,814	NA
Missouri	5,341	4,830	5,473	6,788	6,360	7,047
Montana	1,687	1,244	1,521	1,481	1,449	1,884
Nebraska	3,076	2,662	2,543	3,043	2,902	3,481
Nevada	2,337	2,455	2,453	2,174	1,979	1,593
New Hampshire	431	473	457	468	498	481
New Jersey	14,727	15,723	16,455	17,152	17,655	18,980
New Mexico	3,179	3,131	3,190	2,891	2,895	3,254
New York	21,404	NA	22,542	26,423	NA	NA
North Carolina	9,042	9,439	9,366	10,846	10,404	10,752
North Dakota	1,794	1,961	1,853	1,924	1,844	2,072
Ohio	24,008	25,977	29,362	32,257	31,779	35,912
Oklahoma	16,280	13,793	14,388	16,578	17,131	16,497
Oregon	6,767	7,015	NA	NA	8,744	9,760
Pennsylvania	17,926	18,161	19,808	21,699	20,811	22,115
Rhode Island	2,042	NA	2,078	2,117	2,011	2,173
South Carolina	8,464	8,713	8,159	9,121	9,129	9,645
South Dakota	307	697	279	474	500	565
Tennessee	11,714	11,710	12,020	14,188	12,628	NA
Texas	150,210	154,540	153,724	159,503	148,544	169,452
Utah	3,678	3,668	4,480	4,273	4,080	4,735
Vermont	152	164	164	194	205	223
Virginia	8,290	6,375	7,746	6,497	7,444	6,747
Washington	NA	NA	NA	NA	NA	NA
West Virginia	2,734	2,753	4,584	5,091	4,659	5,054
Wisconsin	9,204	9,508	11,658	14,819	13,298	16,337
Wyoming	4,119	4,293	3,344	NA	NA	5,156
Total	**648,951**	**671,804**	**701,817**	**746,491**	**729,765**	**794,004**

See footnotes at end of table.

Table 17. Natural Gas Deliveries to Industrial Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1997					
	Total	December	November	October	September	August
Alabama	201,240	19,049	17,956	16,677	15,298	15,537
Alaska	73,599	6,851	5,551	6,290	4,218	6,373
Arizona	27,864	2,678	2,352	2,329	2,576	2,369
Arkansas	147,969	13,294	12,753	12,551	11,111	12,082
California	737,354	64,122	63,615	58,363	68,290	68,738
Colorado	73,781	7,037	6,542	5,174	4,717	6,458
Connecticut	34,554	3,438	2,840	2,627	2,378	2,549
Delaware	14,805	1,599	1,331	1,193	1,114	1,009
District of Columbia	0	0	0	0	0	0
Florida	130,816	11,157	10,619	10,628	10,448	10,872
Georgia	174,747	13,568	12,922	13,369	12,457	13,862
Hawaii	342	342	0	0	0	0
Idaho [a]	34,999	3,158	3,109	3,226	2,756	2,371
Illinois	317,755	30,894	27,921	24,667	22,090	20,598
Indiana	290,723	27,648	28,003	24,659	21,620	20,894
Iowa	107,463	10,549	9,896	9,571	8,083	8,285
Kansas	112,089	11,682	8,483	8,107	7,599	8,302
Kentucky	95,724	9,220	8,729	8,508	6,879	6,862
Louisiana	1,004,383	84,522	82,180	87,977	83,556	86,060
Maine	2,525	218	299	246	211	193
Maryland	65,954	13,535	4,361	4,427	4,406	5,041
Massachusetts	108,295	8,984	8,165	7,916	7,449	8,618
Michigan	338,456	33,117	28,965	25,006	23,949	24,022
Minnesota	107,338	10,132	10,200	9,130	7,261	8,379
Mississippi	83,967	7,562	7,751	7,063	5,976	6,650
Missouri	71,164	6,842	6,397	5,161	4,392	4,336
Montana	18,766	2,120	1,900	1,656	1,325	1,287
Nebraska	44,418	5,064	2,736	3,638	2,797	3,505
Nevada	28,925	2,330	2,316	2,512	2,528	2,521
New Hampshire	5,830	468	442	499	463	451
New Jersey	202,418	18,335	15,921	15,505	14,356	18,611
New Mexico	40,854	3,528	3,319	3,092	3,258	3,217
New York	305,521	26,822	26,731	20,891	25,050	22,613
North Carolina	111,513	9,830	10,055	9,948	8,313	8,157
North Dakota	20,580	1,975	1,525	1,556	1,518	1,593
Ohio	335,993	31,923	29,457	26,118	23,913	23,310
Oklahoma	206,677	16,693	15,943	15,546	16,738	17,677
Oregon	90,403	9,751	8,789	8,242	8,019	8,218
Pennsylvania	238,220	21,967	21,958	17,472	16,814	17,511
Rhode Island	24,472	2,179	2,148	1,509	1,440	1,491
South Carolina	102,929	9,226	8,685	8,238	8,832	8,184
South Dakota	6,928	606	618	424	470	499
Tennessee	138,877	12,776	11,768	11,228	10,408	12,556
Texas	2,058,755	169,958	167,175	167,787	165,238	174,495
Utah	44,162	4,492	4,116	4,216	2,488	3,361
Vermont	2,334	235	226	223	176	157
Virginia	85,264	8,128	7,094	5,989	6,911	9,236
Washington	111,159	12,255	10,247	9,459	10,909	10,178
West Virginia	57,380	5,201	4,824	4,640	4,515	4,616
Wisconsin	155,677	15,154	14,492	12,184	10,289	9,734
Wyoming	46,936	4,066	4,296	3,889	3,285	3,833
Total	**8,842,896**	**796,281**	**747,720**	**711,325**	**688,885**	**717,470**

[a] Small volumes of natural gas representing onsystem sales to industrial consumers in Idaho are included in the annual total but not in monthly components.

NA Not Available.

Notes: Geographic coverage is the 50 States and the District of Columbia. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy. In 1996, consumption of natural gas for agricultural use is classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use. See Explanatory Note 5 for further explanation.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 18

Table 18. Natural Gas Deliveries to Electric Utility[a] Consumers, by State, 1997-1999

(Million Cubic Feet)

State	YTD 1999	YTD 1998	YTD 1997	1999		1998
				February	January	Total
Alabama	1,111	518	281	550	561	25,546
Alaska	5,252	5,177	5,727	2,519	2,733	28,784
Arizona	4,207	1,764	677	1,783	2,424	38,674
Arkansas	1,940	556	833	1,376	564	40,576
California	39,577	45,015	31,757	19,517	20,060	271,154
Colorado	1,419	823	654	981	438	10,627
Connecticut	30	1,245	1,398	1	29	10,719
Delaware	2,043	329	3,814	912	1,131	11,135
District of Columbia	0	0	0	0	0	0
Florida	28,540	34,701	27,459	13,119	15,422	281,346
Georgia	35	159	59	20	16	22,371
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	3,827	7,478	2,851	1,357	2,470	56,337
Indiana	665	244	283	147	517	9,096
Iowa	338	450	468	193	145	5,947
Kansas	2,226	947	965	1,042	1,184	36,896
Kentucky	528	224	191	90	438	5,760
Louisiana	38,974	25,016	28,351	17,481	21,493	318,395
Maine	0	0	0	0	0	0
Maryland	582	414	232	138	444	12,303
Massachusetts	173	3,551	4,357	51	122	18,427
Michigan	6,710	5,698	4,260	3,061	3,649	48,321
Minnesota	445	222	780	151	294	7,738
Mississippi	10,426	5,864	5,923	4,678	5,748	76,362
Missouri	843	216	137	310	533	16,035
Montana	58	1	91	5	53	522
Nebraska	84	57	108	44	40	5,044
Nevada	8,277	6,910	2,830	3,699	4,578	60,937
New Hampshire	32	26	1	0	32	149
New Jersey	1,365	946	1,769	343	1,022	30,996
New Mexico	4,885	3,718	4,049	2,322	2,563	39,034
New York	16,438	27,008	17,161	8,397	8,041	208,348
North Carolina	37	12	9	3	34	12,418
North Dakota	0	0	0	0	0	0
Ohio	645	210	196	333	312	7,663
Oklahoma	18,107	11,606	11,078	7,519	10,588	174,577
Oregon	2,468	2,571	296	936	1,532	28,883
Pennsylvania	365	482	598	105	261	6,890
Rhode Island	0	4,210	4,109	0	0	15,589
South Carolina	35	44	15	21	14	5,893
South Dakota	245	69	46	120	125	2,865
Tennessee	0	0	0	0	0	6,213
Texas	122,019	103,121	114,883	55,651	66,368	1,242,574
Utah	668	338	297	337	331	5,945
Vermont	8	112	4	2	5	188
Virginia	3,584	1,328	220	1,918	1,666	20,386
Washington	69	497	8	40	28	13,352
West Virginia	51	50	36	24	27	417
Wisconsin	1,198	770	2,944	648	550	16,348
Wyoming	23	207	16	14	9	271
Total	**330,549**	**304,906**	**282,220**	**151,958**	**178,592**	**3,258,054**

See footnotes at end of table.

Table 18. Natural Gas Deliveries to Electric Utility[a] Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1998					
	December	November	October	September	August	July
Alabama	789	568	973	4,213	5,129	5,071
Alaska	2,957	2,669	2,190	2,402	2,038	2,163
Arizona	3,738	2,716	4,777	6,200	8,185	6,791
Arkansas	367	122	1,753	6,764	8,176	7,022
California	17,740	20,126	25,310	31,816	34,624	26,020
Colorado	918	1,046	684	1,378	1,419	1,763
Connecticut	123	9	209	1,605	2,672	1,582
Delaware	911	1,152	985	1,319	1,672	1,648
District of Columbia	0	0	0	0	0	0
Florida	17,667	18,413	28,024	27,465	29,246	31,965
Georgia	259	337	741	3,350	5,027	5,457
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	1,469	1,465	1,426	6,084	7,669	7,640
Indiana	237	172	389	957	1,695	1,911
Iowa	144	147	177	1,099	1,049	933
Kansas	1,679	2,097	1,602	6,109	7,062	7,713
Kentucky	136	151	206	978	1,060	649
Louisiana	18,345	20,877	24,381	36,591	44,636	43,677
Maine	0	0	0	0	0	0
Maryland	499	188	232	2,565	3,146	2,186
Massachusetts	725	777	918	1,127	1,965	1,404
Michigan	3,449	3,163	3,934	5,415	5,520	4,553
Minnesota	120	268	504	1,538	1,461	1,389
Mississippi	4,126	3,553	4,004	9,141	11,125	10,887
Missouri	515	521	228	3,067	3,997	3,750
Montana	36	33	48	69	83	80
Nebraska	106	35	154	955	1,161	1,022
Nevada	5,362	4,649	5,732	6,460	8,818	8,189
New Hampshire	0	25	0	0	26	37
New Jersey	792	804	376	3,446	6,216	7,105
New Mexico	2,876	2,246	2,708	3,782	4,850	5,283
New York	10,911	8,116	15,872	20,464	34,201	29,277
North Carolina	36	29	136	2,132	3,116	2,041
North Dakota	0	0	0	0	0	0
Ohio	351	170	272	1,333	1,426	1,307
Oklahoma	13,066	11,482	11,983	21,106	26,807	26,740
Oregon	3,009	4,188	3,701	4,014	3,781	3,008
Pennsylvania	357	98	220	561	455	1,411
Rhode Island	0	0	0	0	2,251	2,238
South Carolina	42	97	72	919	1,237	1,239
South Dakota	189	190	61	366	608	627
Tennessee	0	0	190	1,860	1,123	1,407
Texas	71,865	61,712	95,036	143,064	161,408	174,322
Utah	493	165	648	1,206	1,323	1,126
Vermont	4	3	7	11	8	15
Virginia	757	625	1,435	3,323	3,645	2,969
Washington	635	1,742	3,318	2,749	3,470	621
West Virginia	25	56	52	20	34	53
Wisconsin	730	589	486	2,044	2,338	3,059
Wyoming	5	6	13	9	1	5
Total	**188,557**	**177,596**	**246,171**	**381,075**	**456,960**	**449,354**

See footnotes at end of table.

Table 18

Table 18. Natural Gas Deliveries to Electric Utility[a] Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1998					
	June	May	April	March	February	January
Alabama	4,763	2,843	296	382	157	362
Alaska	2,102	2,420	2,274	2,391	2,316	2,862
Arizona	1,986	674	1,127	718	803	961
Arkansas	6,618	5,431	2,262	1,507	269	286
California	15,338	13,746	18,053	23,365	18,272	26,743
Colorado	914	690	581	412	446	377
Connecticut	1,708	1,385	157	23	109	1,135
Delaware	1,196	900	548	475	74	255
District of Columbia	0	0	0	0	0	0
Florida	33,183	26,818	15,852	18,011	15,630	19,071
Georgia	4,959	1,891	41	149	57	102
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	7,325	7,006	4,790	3,985	3,502	3,977
Indiana	1,732	1,102	231	427	129	115
Iowa	749	674	288	237	195	255
Kansas	5,133	3,088	575	891	426	521
Kentucky	950	1,017	107	282	138	86
Louisiana	38,806	31,804	18,072	16,190	9,854	15,161
Maine	0	0	0	0	0	0
Maryland	1,396	932	373	371	222	191
Massachusetts	2,164	2,661	1,575	1,561	1,316	2,235
Michigan	5,074	4,196	3,582	3,735	2,480	3,218
Minnesota	979	792	264	202	104	118
Mississippi	10,629	8,715	4,398	3,920	2,774	3,090
Missouri	2,425	947	208	160	80	137
Montana	26	89	15	39	0	1
Nebraska	702	621	173	58	21	36
Nevada	4,036	3,932	3,926	2,925	3,377	3,532
New Hampshire	35	0	0	0	26	0
New Jersey	4,303	3,925	1,248	1,835	419	528
New Mexico	4,019	3,015	3,446	3,091	1,801	1,917
New York	24,080	18,922	9,089	10,407	10,285	16,724
North Carolina	3,788	1,026	12	91	1	11
North Dakota	0	0	0	0	0	0
Ohio	1,103	1,005	179	307	96	114
Oklahoma	20,703	13,832	7,905	9,348	5,179	6,427
Oregon	835	176	2,265	1,334	1,101	1,470
Pennsylvania	2,017	622	260	406	257	225
Rhode Island	1,453	1,943	1,606	1,888	1,599	2,612
South Carolina	1,413	687	37	105	11	33
South Dakota	315	366	33	42	6	63
Tennessee	1,202	432	0	0	0	0
Texas	153,383	115,390	82,922	80,353	48,953	54,167
Utah	160	157	153	177	164	174
Vermont	7	12	6	3	47	65
Virginia	2,253	2,157	698	1,196	476	852
Washington	33	14	152	121	5	492
West Virginia	46	30	22	29	29	21
Wisconsin	2,554	2,279	394	1,106	352	418
Wyoming	10	6	8	3	200	7
Total	**378,607**	**290,368**	**190,201**	**194,258**	**133,757**	**171,149**

See footnotes at end of table.

Table 18. Natural Gas Deliveries to Electric Utility[a] Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1997					
	Total	December	November	October	September	August
Alabama	9,997	87	295	846	1,247	2,373
Alaska	33,510	3,013	2,668	2,680	2,289	2,432
Arizona	23,385	752	399	1,542	5,103	4,808
Arkansas	24,805	294	375	2,293	3,376	5,269
California	377,946	26,274	22,422	35,151	56,539	48,248
Colorado	5,536	450	385	641	667	716
Connecticut	16,761	554	1,446	2,234	1,722	2,300
Delaware	16,092	699	681	356	667	1,592
District of Columbia	0	0	0	0	0	0
Florida	296,903	21,491	14,278	21,229	27,022	33,982
Georgia	7,342	49	124	308	1,159	2,199
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	44,607	5,018	3,906	3,795	2,375	3,807
Indiana	4,661	137	211	281	242	478
Iowa	4,124	208	252	459	235	373
Kansas	25,822	1,991	2,478	2,643	2,111	3,489
Kentucky	2,194	158	190	200	181	311
Louisiana	277,438	16,781	14,535	22,047	30,516	34,790
Maine	0	0	0	0	0	0
Maryland	11,007	209	364	749	623	1,051
Massachusetts	51,490	2,411	3,176	3,245	4,785	5,579
Michigan	33,287	3,028	3,135	3,242	2,922	2,852
Minnesota	6,098	112	139	382	289	669
Mississippi	73,083	4,573	4,060	5,428	8,115	11,934
Missouri	7,465	310	340	557	749	1,211
Montana	420	21	30	40	27	46
Nebraska	2,656	34	77	354	263	364
Nevada	51,777	3,648	1,803	4,364	6,209	7,830
New Hampshire	564	34	26	0	60	77
New Jersey	29,534	552	1,340	2,085	1,349	4,238
New Mexico	33,375	1,998	2,224	3,224	2,834	4,337
New York	217,504	14,287	12,326	16,084	19,134	28,915
North Carolina	4,512	3	25	507	433	747
North Dakota	1	0	0	0	0	0
Ohio	3,486	122	245	396	268	303
Oklahoma	128,818	11,401	8,233	10,061	14,023	20,503
Oregon	10,680	1,917	1,075	990	2,765	2,957
Pennsylvania	7,370	365	212	301	417	923
Rhode Island	27,160	2,602	2,488	2,503	2,364	2,423
South Carolina	2,731	35	112	240	212	422
South Dakota	1,731	83	90	45	88	228
Tennessee	1,636	0	0	209	0	328
Texas	1,056,550	69,566	72,391	90,883	126,044	141,896
Utah	4,078	177	173	134	906	1,080
Vermont	36	4	2	4	2	4
Virginia	11,572	851	353	732	541	1,369
Washington	2,618	187	220	164	1,191	731
West Virginia	219	11	2	17	15	9
Wisconsin	15,776	467	400	743	697	895
Wyoming	95	15	15	5	5	3
Total	**2,968,453**	**196,980**	**179,723**	**244,394**	**332,781**	**391,090**

[a] Includes all steam electric utility generating plants with a combined capacity of 50 megawatts or greater.

Notes: Geographic coverage is the 50 States and the District of Columbia.

See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-759, "Monthly Power Plant Report."

Table 19

Table 19. Natural Gas Deliveries to All Consumers, by State, 1997-1999

(Million Cubic Feet)

State	YTD 1999	YTD 1998	YTD 1997	1999		1998
				February	January	Total
Alabama	58,216	62,892	61,165	27,246	30,970	300,415
Alaska	27,984	26,963	28,948	13,158	14,826	NA
Arizona	28,030	26,893	23,448	13,011	15,019	134,452
Arkansas	50,059	46,869	52,782	21,807	28,252	NA
California	401,886	394,312	339,555	194,473	207,412	1,870,106
Colorado	70,742	68,862	71,318	32,456	38,285	NA
Connecticut	31,790	30,940	31,652	15,078	16,712	121,350
Delaware	10,819	7,979	11,518	5,203	5,616	40,707
District of Columbia	10,258	9,698	10,014	4,857	5,400	30,373
Florida	61,894	71,541	60,808	28,874	33,020	473,751
Georgia	66,516	82,091	87,413	30,600	35,916	335,333
Hawaii	472	484	435	238	233	2,669
Idaho	15,415	15,579	14,669	7,448	7,967	61,955
Illinois	284,045	253,957	303,482	118,464	165,581	944,659
Indiana	NA	125,819	142,558	NA	NA	NA
Iowa	63,662	59,008	67,095	26,622	37,039	229,735
Kansas	NA	69,553	59,073	NA	NA	NA
Kentucky	NA	47,468	55,038	21,978	NA	187,141
Louisiana	219,439	209,216	217,865	100,272	119,168	NA
Maine	1,491	1,406	1,421	578	913	NA
Maryland	NA	45,135	49,194	NA	27,203	NA
Massachusetts	NA	81,167	87,675	NA	NA	NA
Michigan	239,866	226,254	258,401	107,362	132,504	831,885
Minnesota	93,995	82,454	94,751	41,064	52,930	302,084
Mississippi	NA	NA	37,384	18,533	NA	NA
Missouri	NA	75,579	90,798	NA	45,831	255,416
Montana	13,125	12,793	15,215	5,688	7,437	NA
Nebraska	30,772	30,123	35,132	12,934	17,838	109,646
Nevada	28,650	25,310	21,237	13,191	15,458	142,541
New Hampshire	5,706	5,373	5,285	2,590	3,115	NA
New Jersey	NA	136,606	150,083	NA	NA	NA
New Mexico	NA	31,257	34,633	16,409	NA	145,612
New York	NA	NA	267,058	NA	NA	NA
North Carolina	49,442	53,967	51,145	21,832	27,610	215,593
North Dakota	11,805	10,575	11,697	5,967	5,837	41,491
Ohio	229,153	213,376	244,120	107,908	121,245	NA
Oklahoma	85,344	85,487	90,595	37,020	48,324	476,035
Oregon	40,939	38,972	34,132	19,114	21,825	NA
Pennsylvania	166,166	150,893	175,814	79,300	86,866	NA
Rhode Island	13,085	17,299	17,453	6,077	7,008	NA
South Carolina	31,665	35,162	31,007	14,128	17,536	155,973
South Dakota	8,704	7,909	10,188	3,646	5,058	29,298
Tennessee	66,142	NA	67,975	28,158	37,984	NA
Texas	561,919	541,518	599,228	255,885	306,033	NA
Utah	32,445	34,520	35,547	15,610	16,835	138,895
Vermont	2,206	2,287	2,137	1,023	1,184	7,726
Virginia	57,714	55,203	57,067	28,564	29,151	NA
Washington	NA	NA	44,802	NA	NA	NA
West Virginia	26,204	26,582	28,236	11,950	14,254	NA
Wisconsin	106,082	90,643	109,007	44,128	61,954	354,578
Wyoming	NA	NA	15,613	NA	7,653	NA
Total	**4,272,416**	**4,160,537**	**4,412,863**	**1,938,601**	**2,333,816**	**19,353,555**

See footnotes at end of table.

Table 19. Natural Gas Deliveries to All Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1998					
	December	November	October	September	August	July
Alabama	23,534	19,856	19,776	21,860	24,542	23,471
Alaska	NA	NA	NA	NA	NA	10,373
Arizona	14,346	9,433	10,323	10,941	13,309	12,050
Arkansas	21,135	16,795	16,623	21,795	23,251	21,741
California	186,227	151,474	140,054	146,001	150,877	137,487
Colorado	29,840	19,959	12,965	11,011	11,521	NA
Connecticut	12,418	9,164	6,999	6,999	8,154	7,337
Delaware	3,961	3,589	2,871	2,857	3,234	3,131
District of Columbia	3,293	2,293	1,340	1,176	1,174	1,242
Florida	33,549	33,673	42,172	42,145	43,287	46,686
Georgia	33,189	26,768	19,977	17,087	23,974	23,938
Hawaii	229	214	202	212	228	214
Idaho	6,707	5,353	3,948	3,405	3,203	3,429
Illinois	119,331	90,632	58,574	45,786	45,191	43,345
Indiana	NA	NA	NA	NA	NA	NA
Iowa	26,120	20,707	14,907	11,196	11,442	11,556
Kansas	NA	25,994	18,590	19,008	24,716	27,485
Kentucky	22,614	17,611	11,855	9,983	10,000	9,770
Louisiana	121,173	96,974	NA	124,332	133,502	127,943
Maine	670	NA	452	295	278	251
Maryland	19,949	13,189	NA	NA	11,097	9,929
Massachusetts	NA	NA	18,469	NA	15,853	16,112
Michigan	93,042	73,532	51,240	37,220	35,808	35,320
Minnesota	40,705	30,638	20,204	11,155	14,914	13,755
Mississippi	15,794	13,000	12,479	18,959	NA	NA
Missouri	27,398	17,749	11,162	12,462	14,406	14,327
Montana	6,569	4,937	3,509	2,167	2,102	2,176
Nebraska	10,494	7,735	5,476	3,561	7,095	8,959
Nevada	15,210	11,727	11,223	10,166	13,421	12,929
New Hampshire	2,033	NA	1,219	857	NA	871
New Jersey	NA	NA	NA	NA	32,663	33,936
New Mexico	18,414	11,763	8,914	9,670	10,465	10,814
New York	NA	NA	NA	NA	NA	NA
North Carolina	19,245	16,376	12,630	13,759	14,953	13,148
North Dakota	4,685	3,789	2,153	2,186	2,187	2,043
Ohio	96,741	73,111	NA	36,525	36,235	NA
Oklahoma	38,388	31,239	32,913	43,899	48,285	46,883
Oregon	21,167	18,653	15,418	14,253	14,248	13,185
Pennsylvania	64,611	50,045	35,333	NA	NA	28,412
Rhode Island	5,371	4,569	3,454	2,871	5,009	5,305
South Carolina	14,080	12,475	10,663	10,940	11,109	10,338
South Dakota	3,736	2,814	1,250	1,294	1,538	1,600
Tennessee	27,441	21,469	17,987	18,058	17,415	17,040
Texas	337,337	281,351	NA	317,245	348,252	380,407
Utah	19,052	12,689	10,621	7,336	6,535	6,659
Vermont	895	673	453	403	301	325
Virginia	24,374	NA	16,165	15,462	16,133	16,599
Washington	NA	NA	NA	NA	NA	NA
West Virginia	11,062	NA	5,905	NA	NA	NA
Wisconsin	45,711	33,445	22,491	17,723	17,737	16,504
Wyoming	7,931	NA	5,537	4,617	NA	NA
Total	**1,963,254**	**1,551,376**	**1,328,333**	**1,314,254**	**1,418,248**	**1,424,467**

See footnotes at end of table.

Table 19. Natural Gas Deliveries to All Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1998					
	June	May	April	March	February	January
Alabama	24,004	26,255	24,632	29,592	29,830	33,062
Alaska	10,255	10,891	11,880	13,049	12,525	14,438
Arizona	7,467	7,574	10,115	12,000	12,168	14,725
Arkansas	NA	20,432	19,025	24,783	23,126	23,742
California	120,557	140,354	150,887	151,877	190,770	203,541
Colorado	NA	18,653	24,714	31,312	32,169	36,693
Connecticut	7,280	7,933	10,871	13,255	14,383	16,557
Delaware	2,833	2,924	3,298	4,029	3,776	4,203
District of Columbia	1,348	1,720	3,025	4,064	4,747	4,951
Florida	48,216	42,712	32,793	36,977	32,918	38,623
Georgia	24,020	21,199	25,805	37,286	39,542	42,548
Hawaii	228	216	223	221	232	252
Idaho	3,876	4,186	5,684	6,585	7,284	8,295
Illinois	46,294	51,218	79,882	110,448	107,822	146,135
Indiana	NA	32,766	NA	62,621	57,103	68,716
Iowa	11,035	13,144	20,373	30,248	25,934	33,073
Kansas	22,388	21,123	23,512	35,146	31,669	37,884
Kentucky	10,292	11,505	14,076	21,967	21,257	26,211
Louisiana	NA	111,320	101,827	110,389	97,305	111,911
Maine	305	335	470	610	629	777
Maryland	9,573	10,440	14,048	20,680	21,403	23,731
Massachusetts	NA	NA	29,252	36,404	38,346	42,821
Michigan	43,847	51,625	77,976	106,021	106,501	119,753
Minnesota	14,572	14,737	21,645	37,304	36,305	46,150
Mississippi	NA	NA	NA	NA	17,461	NA
Missouri	13,247	13,736	21,662	33,689	34,873	40,706
Montana	3,638	NA	4,240	5,477	5,313	7,480
Nebraska	5,832	6,933	9,827	13,611	13,802	16,321
Nevada	9,447	10,147	11,412	11,550	12,082	13,229
New Hampshire	NA	1,226	1,864	2,183	2,585	2,788
New Jersey	31,639	41,615	46,964	65,242	66,099	70,507
New Mexico	8,579	9,248	11,952	14,536	12,873	18,385
New York	NA	NA	82,450	NA	NA	NA
North Carolina	15,680	14,761	17,721	23,352	25,906	28,061
North Dakota	2,397	2,958	3,759	4,760	4,840	5,735
Ohio	NA	45,666	67,612	98,219	99,777	113,599
Oklahoma	40,664	33,009	32,165	43,105	40,820	44,667
Oregon	10,671	10,944	NA	NA	17,735	21,237
Pennsylvania	31,355	34,777	NA	72,422	75,456	75,438
Rhode Island	4,612	NA	NA	7,899	7,949	9,351
South Carolina	11,503	11,680	12,349	15,673	17,097	18,065
South Dakota	1,209	2,114	2,244	3,588	3,464	4,445
Tennessee	16,972	17,809	21,904	31,153	28,238	NA
Texas	320,879	292,694	266,948	287,964	252,419	289,099
Utah	6,949	7,578	12,236	14,719	16,672	17,848
Vermont	347	409	716	918	1,085	1,202
Virginia	14,962	14,714	18,955	25,190	27,386	27,818
Washington	NA	NA	NA	NA	NA	NA
West Virginia	NA	NA	9,625	12,819	12,904	13,678
Wisconsin	18,699	19,667	27,883	44,074	39,113	51,530
Wyoming	5,041	5,547	5,396	NA	NA	NA
Total	**1,324,388**	**1,359,461**	**1,556,798**	**1,952,439**	**1,940,440**	**2,220,097**

See footnotes at end of table.

Table 19. Natural Gas Deliveries to All Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1997					
	Total	December	November	October	September	August
Alabama	292,094	30,822	24,666	20,865	19,874	21,774
Alaska	149,164	15,172	12,560	13,113	8,844	10,563
Arizona	112,590	11,575	6,994	6,675	10,639	9,851
Arkansas	244,644	23,947	19,854	17,536	16,564	19,396
California	1,850,248	185,860	147,134	137,655	164,736	156,325
Colorado	263,988	34,668	23,250	12,664	10,469	11,882
Connecticut	134,557	15,769	11,812	9,002	6,681	7,525
Delaware	46,480	4,356	3,196	2,086	2,211	2,965
District of Columbia	33,824	4,795	2,768	1,452	1,245	1,226
Florida	477,601	38,205	29,083	35,159	40,597	48,113
Georgia	353,700	41,536	35,681	23,924	19,492	21,587
Hawaii	2,611	552	78	191	188	184
Idaho	61,707	7,186	5,519	4,449	3,487	3,021
Illinois	1,062,463	132,707	110,989	70,209	42,581	40,316
Indiana	546,337	64,388	54,190	37,412	27,504	26,411
Iowa	243,476	30,016	24,461	17,115	11,323	11,251
Kansas	248,563	29,528	22,869	14,839	12,763	15,259
Kentucky	202,583	26,707	21,185	14,189	9,760	9,195
Louisiana	1,360,160	112,335	102,939	113,454	117,136	123,872
Maine	6,247	735	694	488	332	296
Maryland	204,319	31,410	17,582	11,557	9,379	9,962
Massachusetts	377,911	38,594	30,037	22,843	20,155	22,316
Michigan	943,881	112,039	89,089	55,893	41,643	39,832
Minnesota	334,572	39,996	36,158	21,195	12,500	13,651
Mississippi	206,749	19,424	16,400	14,616	15,793	20,654
Missouri	276,124	35,740	25,019	12,114	9,958	10,011
Montana	54,114	7,361	5,273	3,728	2,287	2,167
Nebraska	128,031	14,339	10,024	7,229	5,472	7,103
Nevada	127,969	12,443	7,850	9,176	10,741	12,283
New Hampshire	20,822	2,445	1,788	1,237	937	901
New Jersey	617,638	73,183	53,491	35,294	28,244	34,275
New Mexico	142,353	18,573	12,587	8,917	8,133	9,587
New York	1,220,113	123,888	101,134	75,512	71,369	80,369
North Carolina	206,940	24,543	18,390	13,802	11,392	11,394
North Dakota	42,826	4,737	3,787	2,549	2,025	2,025
Ohio	878,124	107,489	83,928	55,298	36,252	34,081
Oklahoma	452,453	45,168	34,038	29,638	34,074	41,433
Oregon	159,105	19,704	14,600	12,135	12,639	12,849
Pennsylvania	652,219	79,772	62,794	40,047	28,446	27,918
Rhode Island	82,100	8,703	7,312	5,308	4,738	4,756
South Carolina	150,962	16,582	12,978	10,282	11,399	10,059
South Dakota	32,289	3,735	3,069	1,556	1,152	1,210
Tennessee	259,773	32,226	23,385	15,919	13,668	15,880
Texas	3,566,640	301,259	280,454	282,035	312,902	338,035
Utah	137,605	20,196	13,494	10,669	6,475	6,849
Vermont	8,052	988	723	529	345	293
Virginia	232,674	30,339	20,442	13,107	11,415	14,548
Washington	222,391	30,513	25,964	15,906	16,143	14,325
West Virginia	119,512	14,615	11,696	7,894	6,412	6,360
Wisconsin	396,055	47,139	41,199	26,442	16,682	15,970
Wyoming	70,797	7,494	6,457	5,066	3,926	4,369
Total	**20,018,151**	**2,135,495**	**1,731,064**	**1,379,970**	**1,293,122**	**1,366,476**

NA Not Available.

Notes: Geographic coverage is the 50 States and the District of Columbia. Gas volumes delivered for use as vehicle fuel are included in the annual total for commercial deliveries but not in the monthly components. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers" and Form EIA-759, "Monthly Power Plant Report."

Table 20

Table 20. Average City Gate Price, by State, 1997-1999

(Dollars per Thousand Cubic Feet)

State	YTD 1999	YTD 1998	YTD 1997	1999		1998		
				February	January	Total	December	November
Alabama	2.69	3.06	4.23	2.79	2.62	3.26	3.16	3.26
Alaska	1.33	1.74	1.85	1.34	1.32	NA	1.73	NA
Arizona	2.18	2.37	3.60	2.19	2.17	2.55	2.31	2.67
Arkansas	2.98	2.98	3.81	3.40	2.69	2.94	3.13	3.03
California	2.24	2.25	3.71	2.25	2.23	2.38	2.76	2.49
Colorado	2.15	NA	3.65	2.07	2.21	NA	2.74	2.18
Connecticut	4.57	5.23	5.91	4.74	4.44	5.06	5.51	4.54
Delaware	3.65	2.85	5.08	3.68	3.63	3.01	4.10	3.83
District of Columbia	0.00	0.00	0.00	—	—	0.00	—	—
Florida	3.28	3.53	4.59	3.24	3.30	3.36	3.36	3.66
Georgia	4.05	3.31	4.53	3.47	4.61	3.51	4.34	3.24
Hawaii	4.78	6.08	6.93	4.47	5.07	5.33	5.17	5.14
Idaho	1.83	1.92	2.26	1.92	1.76	1.96	1.86	1.99
Illinois	2.53	2.81	3.60	2.59	2.49	2.75	2.74	2.65
Indiana	NA	2.48	3.71	NA	NA	NA	2.75	NA
Iowa	2.79	3.63	3.84	3.02	2.62	3.48	2.79	3.05
Kansas	NA	3.14	4.05	NA	NA	3.05	2.79	3.20
Kentucky	3.23	3.16	3.88	3.10	3.35	3.22	3.08	3.19
Louisiana	2.20	2.53	3.68	2.19	2.20	NA	2.48	2.20
Maine	3.07	3.25	4.33	2.84	3.27	NA	3.10	NA
Maryland	NA	3.26	4.13	NA	2.82	NA	3.19	3.42
Massachusetts	NA	3.19	4.19	NA	NA	NA	NA	3.49
Michigan	2.90	2.92	3.68	3.02	2.79	2.80	3.05	2.86
Minnesota	2.70	3.10	4.05	2.84	2.60	3.02	3.04	3.04
Mississippi	NA	NA	3.93	2.92	NA	NA	3.14	3.16
Missouri	2.64	2.97	3.83	2.89	2.49	3.32	2.77	3.12
Montana	2.73	2.56	3.64	2.70	2.75	2.40	2.40	2.57
Nebraska	2.99	3.62	4.12	3.11	2.90	3.23	3.10	2.84
Nevada	2.47	3.02	3.81	2.54	2.42	3.02	2.65	2.60
New Hampshire	3.65	3.75	4.71	3.56	3.73	NA	3.63	3.41
New Jersey	NA	3.85	4.48	NA	NA	NA	NA	NA
New Mexico	2.11	2.13	3.22	2.08	2.13	2.07	2.18	2.16
New York	NA	NA	4.08	NA	NA	NA	NA	NA
North Carolina	3.06	3.57	4.35	3.00	3.11	3.49	3.09	3.16
North Dakota	2.85	2.90	3.96	2.84	2.85	2.80	3.01	3.10
Ohio	4.37	4.56	5.32	4.62	4.22	4.66	4.32	4.23
Oklahoma	3.33	2.74	3.61	5.21	2.41	2.55	2.54	2.52
Oregon	2.54	2.43	2.68	2.68	2.43	NA	2.50	2.61
Pennsylvania	3.26	3.66	4.18	3.41	3.15	NA	3.45	3.48
Rhode Island	NA	3.63	4.59	NA	3.32	NA	1.25	4.04
South Carolina	2.69	3.22	4.10	2.17	3.14	0.82	0.12	3.34
South Dakota	3.26	3.39	4.04	3.37	3.18	3.23	2.69	3.07
Tennessee	2.79	NA	3.94	2.72	2.85	NA	3.68	3.57
Texas	2.82	3.10	4.48	2.61	2.95	2.92	3.03	2.85
Utah	2.97	3.45	2.70	3.11	2.86	3.22	3.58	3.07
Vermont	2.92	2.62	1.81	3.01	2.85	2.58	2.52	2.67
Virginia	3.15	3.81	4.54	2.97	3.32	3.69	3.25	3.31
Washington	NA	NA	3.07	NA	NA	NA	NA	NA
West Virginia	5.14	3.23	3.58	4.00	6.98	NA	3.79	NA
Wisconsin	2.63	3.12	3.87	2.77	2.52	3.36	2.84	3.35
Wyoming	3.26	NA	3.92	3.49	3.07	NA	4.14	NA
Total	**2.90**	**3.19**	**4.05**	**2.93**	**2.88**	**3.02**	**2.44**	**3.01**

See footnotes at end of table.

Table 20. Average City Gate Price, by State, 1997-1999

(Dollars per Thousand Cubic Feet) — Continued

State	1998							
	October	September	August	July	June	May	April	March
Alabama	3.64	3.43	3.82	3.97	3.86	3.56	3.20	3.03
Alaska	1.73	1.71	1.71	1.64	1.67	1.68	1.71	1.73
Arizona	2.61	2.76	2.84	2.85	2.60	2.93	2.75	2.55
Arkansas	2.93	1.88	2.38	3.23	2.31	3.00	2.96	3.13
California	2.22	1.95	2.46	2.39	2.34	2.49	2.33	2.38
Colorado	2.24	NA	2.26	NA	2.43	2.46	NA	NA
Connecticut	4.28	4.69	4.87	5.14	4.74	5.08	5.89	4.87
Delaware	3.75	3.76	2.70	2.86	4.35	1.79	2.63	2.73
District of Columbia	—	—	—	—	—	—	—	—
Florida	3.48	2.99	3.10	3.14	2.96	3.15	3.92	3.25
Georgia	3.08	3.37	3.45	3.57	3.01	3.55	3.63	3.85
Hawaii	4.95	5.12	5.06	4.77	4.86	5.21	5.21	6.25
Idaho	1.95	2.38	2.14	2.81	2.18	1.94	1.96	1.81
Illinois	2.43	2.24	2.49	3.16	2.15	3.64	2.90	2.81
Indiana	NA	NA	2.53	NA	1.04	2.80	NA	2.32
Iowa	4.98	4.00	4.29	4.11	1.98	4.17	3.33	3.42
Kansas	2.97	2.83	3.03	3.87	3.66	3.17	2.79	2.86
Kentucky	2.94	3.58	2.85	3.57	3.12	3.33	3.99	3.23
Louisiana	NA	2.01	2.05	2.45	2.19	2.36	2.29	2.53
Maine	3.37	2.69	3.21	5.39	NA	NA	3.25	3.25
Maryland	NA	NA	5.86	7.62	5.94	5.58	4.37	3.44
Massachusetts	3.77	NA	7.10	5.83	5.52	4.56	3.48	3.30
Michigan	2.61	2.69	2.79	2.92	2.50	2.69	2.78	2.97
Minnesota	2.74	2.78	3.06	3.31	2.88	3.24	2.95	3.00
Mississippi	NA	2.65	NA	3.09	2.86	NA	NA	NA
Missouri	4.06	4.50	4.61	5.12	4.87	4.47	3.72	2.97
Montana	2.29	2.20	1.87	2.27	2.39	2.22	2.29	2.50
Nebraska	3.03	2.90	3.01	3.65	2.98	3.73	3.29	2.98
Nevada	2.48	3.79	4.43	3.75	3.37	3.25	3.00	3.29
New Hampshire	NA	3.34	3.80	4.63	NA	3.36	3.37	3.93
New Jersey	4.08	5.83	3.75	3.86	3.57	3.00	3.54	3.53
New Mexico	1.75	1.64	1.86	1.94	1.76	2.04	2.19	2.20
New York	NA	NA	NA	3.34	2.88	NA	3.01	NA
North Carolina	3.46	3.20	3.43	3.95	3.83	3.66	3.91	3.49
North Dakota	2.74	2.11	2.49	2.57	2.34	2.74	2.86	2.91
Ohio	6.02	3.55	4.70	5.16	4.75	5.04	4.89	4.87
Oklahoma	2.16	2.73	2.61	2.38	2.51	2.46	2.36	2.38
Oregon	2.72	2.93	3.60	4.13	3.22	2.78	NA	NA
Pennsylvania	3.74	5.18	NA	5.50	4.79	3.94	NA	5.26
Rhode Island	4.02	4.23	3.53	3.68	3.61	3.70	NA	3.38
South Carolina	3.49	3.48	3.57	4.09	3.81	3.90	3.66	3.34
South Dakota	2.76	3.91	4.68	4.27	2.91	4.42	4.37	2.60
Tennessee	3.06	2.42	2.77	3.12	3.39	3.40	6.62	2.42
Texas	2.73	2.46	2.70	2.91	2.65	2.97	2.94	2.84
Utah	2.94	3.37	3.48	2.64	2.73	2.62	2.89	3.23
Vermont	1.99	2.26	2.34	2.60	2.69	2.82	2.74	2.92
Virginia	3.80	4.52	5.14	4.51	4.32	4.37	3.64	3.25
Washington	NA	NA	NA	NA	NA	NA	NA	NA
West Virginia	3.48	3.59	NA	NA	NA	NA	3.61	2.58
Wisconsin	3.24	4.97	4.38	4.36	3.82	3.63	3.54	3.33
Wyoming	2.88	2.46	2.93	NA	2.53	NA	1.28	3.29
Total	**3.02**	**2.76**	**3.13**	**3.39**	**2.99**	**3.11**	**3.21**	**3.22**

See footnotes at end of table.

Table 20

Table 20. Average City Gate Price, by State, 1997-1999

(Dollars per Thousand Cubic Feet) — Continued

State	1998		1997					
	February	January	Total	December	November	October	September	August
Alabama	2.93	3.18	3.65	2.60	3.97	4.17	3.83	3.88
Alaska	1.72	1.75	1.81	1.82	1.82	1.78	1.79	1.73
Arizona	2.28	2.46	3.15	2.53	3.48	3.80	3.74	3.16
Arkansas	2.85	3.09	3.23	3.19	3.44	3.61	2.87	3.28
California	2.12	2.35	2.98	2.65	3.30	3.18	2.74	2.79
Colorado	NA	NA	2.92	2.57	3.59	2.71	2.66	2.41
Connecticut	5.24	5.23	5.11	5.55	3.87	4.96	5.29	5.33
Delaware	3.02	2.71	3.53	2.43	5.78	5.23	1.44	3.17
District of Columbia	—	—	—	—	—	—	—	—
Florida	3.20	3.81	3.97	3.85	4.45	4.64	3.82	3.31
Georgia	3.18	3.43	3.98	3.65	4.01	4.05	5.29	3.89
Hawaii	5.75	6.40	6.42	6.23	6.22	6.09	6.11	6.35
Idaho	1.94	1.89	2.12	1.79	2.07	2.01	2.17	2.50
Illinois	2.85	2.78	3.28	2.92	3.72	4.00	3.78	3.37
Indiana	2.48	2.49	3.03	2.79	3.21	3.64	3.15	2.87
Iowa	3.33	3.80	4.06	4.45	4.85	4.98	5.39	5.86
Kansas	2.73	3.56	3.47	3.60	4.28	3.67	3.47	3.09
Kentucky	3.09	3.22	3.83	4.07	4.28	3.83	3.57	3.62
Louisiana	2.25	2.81	3.04	2.86	3.75	3.44	3.02	2.50
Maine	3.25	3.25	3.84	3.10	2.72	4.11	3.79	4.43
Maryland	3.43	2.96	4.02	3.57	4.22	4.69	5.77	6.05
Massachusetts	2.89	3.40	3.85	3.09	4.14	4.52	5.00	4.91
Michigan	2.89	2.94	2.99	3.19	3.51	3.12	2.87	2.63
Minnesota	2.90	3.27	3.67	4.06	4.52	4.26	4.02	2.97
Mississippi	2.99	NA	3.39	3.31	3.83	3.86	3.25	2.88
Missouri	2.99	2.96	3.75	3.13	3.92	4.66	5.08	4.80
Montana	2.41	2.71	3.16	2.51	3.15	4.47	3.76	3.96
Nebraska	2.70	4.71	4.24	5.31	6.30	5.76	7.03	5.51
Nevada	3.00	3.03	3.39	2.84	3.71	3.46	4.12	3.99
New Hampshire	3.74	3.77	4.10	3.72	4.02	3.95	4.02	4.45
New Jersey	3.38	4.37	4.19	3.77	4.49	4.84	4.34	4.41
New Mexico	2.02	2.24	2.53	2.31	2.85	2.59	2.62	2.18
New York	NA	NA	3.51	3.33	4.00	3.68	2.92	2.79
North Carolina	3.47	3.65	3.97	3.72	4.09	3.95	4.13	3.96
North Dakota	2.85	2.93	3.38	3.01	4.01	3.73	3.53	3.36
Ohio	4.27	4.82	5.18	4.35	4.66	5.09	4.91	5.51
Oklahoma	2.61	2.86	3.12	3.33	3.19	3.04	2.58	2.66
Oregon	2.31	2.53	2.58	2.42	2.73	2.48	3.12	4.01
Pennsylvania	3.64	3.68	4.09	3.84	4.20	4.60	4.22	4.95
Rhode Island	3.35	3.93	4.49	4.02	4.46	4.53	5.71	6.64
South Carolina	3.05	3.37	3.81	3.72	4.13	4.15	4.03	3.86
South Dakota	3.66	3.22	3.65	3.46	3.68	3.43	4.03	4.26
Tennessee	3.84	NA	3.36	3.66	4.37	3.93	2.78	2.51
Texas	2.87	3.26	3.66	3.97	3.86	3.57	3.21	3.11
Utah	3.68	3.25	2.79	3.46	3.07	2.64	2.81	3.02
Vermont	2.66	2.59	2.33	2.64	2.77	2.34	2.29	2.33
Virginia	3.63	3.97	4.14	3.69	4.11	4.71	4.69	4.47
Washington	NA	NA	2.62	2.39	2.82	2.27	2.44	2.41
West Virginia	3.15	3.34	3.17	3.11	3.07	3.62	3.53	3.90
Wisconsin	2.99	3.21	3.67	3.32	3.75	3.91	4.63	5.12
Wyoming	3.31	NA	3.11	2.93	3.61	3.25	3.35	2.90
Total	**3.08**	**3.28**	**3.61**	**3.42**	**3.91**	**3.86**	**3.50**	**3.34**

NA Not Available.

— Not Applicable.

Notes: Geographic coverage is the 50 States and the District of Columbia. Prices in this table represent the average price of natural gas by State at the point where the gas transferred from a pipeline to a local distribution company within the State. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 21. Average Price of Natural Gas Delivered to Residential Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet)

State	YTD 1999	YTD 1998	YTD 1997	1999		1998		
				February	January	Total	December	November
Alabama	7.60	7.26	7.58	8.29	7.13	8.15	8.99	9.94
Alaska	3.53	3.60	3.64	3.53	3.53	3.67	3.51	3.70
Arizona	8.09	7.30	6.73	8.17	8.03	8.56	8.39	9.91
Arkansas	6.13	7.80	6.32	6.94	5.66	7.31	6.83	6.79
California	6.69	6.90	6.27	6.54	6.82	6.93	6.89	6.80
Colorado	4.71	4.53	4.16	4.75	4.68	NA	4.86	5.18
Connecticut	9.93	10.35	10.57	10.18	9.71	10.59	10.96	10.51
Delaware	8.07	8.07	7.60	8.10	8.05	8.86	8.56	9.38
District of Columbia	8.45	8.73	9.59	8.25	8.61	8.97	8.96	9.29
Florida	10.63	10.40	9.95	11.10	10.29	11.54	10.05	12.19
Georgia	2.23	6.28	6.86	2.38	2.12	6.74	2.41	3.43
Hawaii	18.57	20.22	23.35	18.34	18.79	19.33	18.88	19.41
Idaho	5.08	5.07	4.81	5.13	5.03	5.34	5.16	5.43
Illinois	5.23	4.89	6.30	4.62	5.64	5.46	4.77	5.01
Indiana	NA	6.16	5.95	NA	NA	NA	NA	5.77
Iowa	4.90	5.26	5.66	5.07	4.79	5.91	4.91	5.69
Kansas	NA	5.79	6.40	NA	NA	6.08	5.60	5.98
Kentucky	5.16	5.48	5.84	5.27	5.08	5.94	5.24	5.67
Louisiana	5.67	5.88	7.08	5.86	5.56	NA	7.00	7.93
Maine	7.15	7.90	8.35	7.34	7.00	7.93	7.59	7.40
Maryland	NA	7.37	8.07	NA	7.81	NA	8.13	7.86
Massachusetts	NA	9.22	9.45	NA	NA	NA	NA	NA
Michigan	4.72	4.88	5.04	4.76	4.68	5.12	4.82	4.80
Minnesota	5.00	5.08	6.07	5.06	4.96	5.47	5.21	5.30
Mississippi	NA	NA	5.97	5.41	NA	NA	6.22	4.33
Missouri	5.71	6.10	6.62	5.70	5.71	6.56	6.19	6.62
Montana	4.83	4.93	4.46	4.93	4.75	NA	5.05	5.27
Nebraska	4.37	5.12	5.83	4.38	4.37	5.19	4.63	4.77
Nevada	6.72	6.65	5.62	6.75	6.70	7.11	6.74	7.14
New Hampshire	7.51	8.34	9.17	7.60	7.44	NA	8.09	8.27
New Jersey	NA	7.32	7.75	NA	NA	NA	NA	NA
New Mexico	3.17	4.25	5.60	4.25	2.63	5.20	3.21	4.22
New York	NA	8.69	9.72	NA	NA	NA	NA	NA
North Carolina	7.90	8.14	8.74	8.40	7.56	8.71	9.48	8.33
North Dakota	4.64	4.59	4.43	4.67	4.62	5.19	5.04	5.08
Ohio	5.79	6.02	6.77	5.69	5.87	NA	6.08	6.15
Oklahoma	4.85	5.64	6.02	5.48	4.45	6.10	5.66	6.31
Oregon	6.73	6.24	5.90	6.79	6.68	NA	6.72	6.88
Pennsylvania	7.87	8.78	7.83	7.86	7.88	NA	7.89	8.18
Rhode Island	8.80	8.84	8.98	8.90	8.71	NA	9.39	9.79
South Carolina	8.59	8.22	8.45	9.14	8.25	8.50	9.16	8.96
South Dakota	4.97	5.03	5.32	5.09	4.89	5.59	4.99	5.35
Tennessee	6.00	NA	6.89	6.05	5.97	NA	6.30	6.62
Texas	5.06	5.94	6.13	5.20	4.97	6.31	5.52	6.58
Utah	5.42	5.78	4.93	5.33	5.51	5.61	5.66	5.77
Vermont	6.48	6.21	6.04	6.29	6.64	6.54	6.38	6.64
Virginia	7.99	8.08	8.33	7.98	8.01	8.66	8.18	8.52
Washington	NA	NA	5.42	NA	NA	NA	NA	NA
West Virginia	6.92	6.80	6.73	6.96	6.89	NA	7.13	NA
Wisconsin	6.15	5.97	6.79	6.28	6.07	6.08	5.97	6.06
Wyoming	5.00	NA	3.73	5.03	4.98	NA	5.10	NA
Total	**6.21**	**6.44**	**6.76**	**6.24**	**6.18**	**6.82**	**6.36**	**6.60**

See footnotes at end of table.

Table 21

Table 21. Average Price of Natural Gas Delivered to Residential Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet) — Continued

State	1998							
	October	September	August	July	June	May	April	March
Alabama	10.92	10.71	10.78	11.13	10.91	8.99	7.73	7.00
Alaska	3.74	3.01	3.75	4.71	4.02	3.83	3.66	3.71
Arizona	12.07	13.01	13.19	12.24	11.02	9.58	8.14	7.39
Arkansas	8.13	8.81	8.99	9.03	8.72	5.83	6.86	6.41
California	6.88	7.01	7.21	7.07	7.32	7.01	6.80	6.78
Colorado	5.75	8.36	7.44	NA	NA	5.24	4.74	4.49
Connecticut	11.13	11.73	11.80	11.62	11.11	11.57	9.78	10.18
Delaware	11.62	12.78	12.61	11.67	10.99	9.44	8.51	8.15
District of Columbia	10.65	11.22	8.59	8.87	8.50	9.70	8.86	8.62
Florida	14.12	13.56	13.59	13.79	13.30	13.08	11.34	10.51
Georgia	7.99	15.53	15.94	16.76	11.73	13.50	7.09	5.78
Hawaii	19.27	19.41	18.31	18.60	18.75	19.37	19.21	19.87
Idaho	5.80	6.55	6.71	6.26	5.86	5.59	5.38	5.18
Illinois	5.97	8.06	8.16	8.69	8.09	7.94	5.79	4.90
Indiana	6.67	NA	NA	NA	9.95	8.81	NA	6.13
Iowa	7.32	10.97	10.78	11.56	8.41	7.80	6.36	4.79
Kansas	7.54	8.07	7.98	7.88	7.49	6.41	5.92	5.76
Kentucky	7.83	9.19	9.75	7.87	8.15	7.15	6.56	5.25
Louisiana	NA	8.91	8.84	8.85	8.36	8.95	6.46	5.28
Maine	7.61	8.88	9.13	9.11	8.33	8.66	7.90	7.90
Maryland	NA	NA	11.52	12.03	10.82	9.82	8.36	7.53
Massachusetts	9.55	NA	11.36	10.45	NA	NA	9.64	9.37
Michigan	5.38	6.96	7.35	7.12	6.23	5.85	5.11	4.69
Minnesota	6.01	7.04	7.32	7.57	7.15	6.45	5.60	5.18
Mississippi	7.48	7.55	7.59	7.60	7.32	6.44	5.88	NA
Missouri	8.84	9.86	10.94	9.76	8.84	7.40	6.14	5.58
Montana	5.90	7.04	6.89	6.70	6.44	NA	5.15	4.97
Nebraska	5.74	6.91	7.12	6.87	6.42	5.99	5.09	4.74
Nevada	8.00	9.25	9.27	8.69	7.74	7.30	6.90	6.80
New Hampshire	7.39	9.03	NA	9.15	8.20	7.07	6.50	8.50
New Jersey	9.33	NA	9.93	9.63	9.32	6.80	7.71	7.39
New Mexico	7.96	10.19	10.57	10.89	31.23	9.69	6.26	4.55
New York	NA	NA	13.55	7.01	NA	NA	9.26	8.54
North Carolina	11.73	12.56	13.29	12.05	11.81	9.29	7.91	7.77
North Dakota	5.69	7.69	9.87	7.09	7.03	5.96	5.12	4.79
Ohio	7.82	9.30	9.89	NA	7.35	6.56	6.22	5.97
Oklahoma	8.64	9.50	9.33	8.91	8.37	6.84	5.56	5.43
Oregon	7.62	8.78	9.04	8.33	7.48	7.19	NA	NA
Pennsylvania	9.23	NA	NA	11.22	10.51	9.02	NA	8.05
Rhode Island	10.78	12.15	12.14	11.94	10.94	9.67	NA	9.03
South Carolina	9.57	10.10	10.32	10.18	9.76	8.44	7.88	8.02
South Dakota	6.34	8.38	8.63	8.90	6.54	6.88	5.88	5.31
Tennessee	8.09	8.51	9.03	8.68	8.15	6.95	6.42	5.96
Texas	8.16	8.79	8.97	8.86	7.94	7.31	6.29	5.14
Utah	4.78	6.13	7.01	6.70	5.39	5.72	4.85	5.51
Vermont	7.46	5.12	8.77	8.91	8.08	7.28	6.45	6.30
Virginia	10.97	12.22	12.28	12.22	11.73	10.14	8.28	7.75
Washington	NA	NA	NA	NA	NA	NA	NA	NA
West Virginia	7.64	NA	NA	NA	NA	NA	7.55	6.85
Wisconsin	5.42	6.49	6.66	7.16	6.50	6.29	6.02	6.28
Wyoming	5.26	5.20	7.30	NA	5.99	5.79	5.25	5.13
Total	**7.55**	**8.94**	**9.19**	**8.62**	**8.41**	**7.59**	**6.78**	**6.27**

See footnotes at end of table.

Table 21. Average Price of Natural Gas Delivered to Residential Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet) — Continued

State	1998		1997					
	February	January	Total	December	November	October	September	August
Alabama	7.10	7.41	8.35	7.28	7.95	11.05	11.56	11.64
Alaska	3.65	3.56	3.77	3.62	3.69	3.75	3.94	4.49
Arizona	7.40	7.23	7.83	7.61	9.20	11.36	9.13	10.57
Arkansas	6.50	9.42	6.67	6.26	6.43	8.70	9.57	9.29
California	6.49	7.28	6.81	7.20	7.48	7.80	7.42	7.56
Colorado	4.57	4.50	4.81	4.73	5.18	5.96	7.16	6.95
Connecticut	10.33	10.36	10.33	10.15	10.30	10.27	11.45	11.35
Delaware	8.08	8.07	8.36	8.04	8.69	10.74	11.79	11.86
District of Columbia	8.44	9.01	9.39	8.97	11.01	11.27	11.34	8.40
Florida	10.47	10.33	11.90	11.78	13.01	13.85	14.01	14.09
Georgia	6.15	6.40	7.41	6.05	5.91	8.08	10.62	11.74
Hawaii	20.46	19.99	21.74	20.43	20.87	21.07	21.36	21.64
Idaho	5.14	5.01	5.12	4.98	5.28	5.66	6.37	6.52
Illinois	4.91	4.88	5.95	5.38	5.65	6.05	8.01	7.88
Indiana	6.22	6.12	6.37	5.51	5.85	6.65	8.81	9.44
Iowa	4.97	5.49	6.17	6.02	6.41	7.69	11.05	10.11
Kansas	5.77	5.81	6.42	5.92	6.42	7.68	8.49	8.21
Kentucky	5.47	5.48	6.37	6.39	6.09	7.41	7.82	9.10
Louisiana	5.60	6.10	7.16	6.34	7.88	9.43	8.96	8.49
Maine	7.90	7.90	8.47	8.36	8.21	7.80	9.46	9.25
Maryland	7.36	7.38	8.36	7.38	8.71	9.91	10.72	11.35
Massachusetts	9.26	9.19	9.43	9.94	9.70	8.51	10.00	10.39
Michigan	4.92	4.85	5.20	4.98	5.13	5.80	6.88	7.33
Minnesota	5.11	5.07	5.76	5.09	6.04	6.67	8.31	7.94
Mississippi	5.39	NA	6.35	5.74	6.79	8.40	8.06	7.91
Missouri	5.86	6.30	6.61	6.46	6.70	8.86	9.63	9.42
Montana	5.03	4.87	5.05	5.31	5.39	5.81	6.70	6.95
Nebraska	4.93	5.28	5.69	6.01	6.01	7.31	7.67	7.47
Nevada	6.79	6.53	6.27	6.18	6.72	7.64	7.92	7.96
New Hampshire	8.38	8.30	8.48	8.46	8.87	7.47	8.93	9.17
New Jersey	7.23	7.41	7.93	7.62	7.77	8.53	9.91	10.12
New Mexico	5.23	3.72	5.87	3.68	4.56	8.48	11.05	11.33
New York	8.62	8.75	9.73	9.34	9.93	11.38	12.59	11.62
North Carolina	7.93	8.33	8.98	8.03	8.21	11.17	13.08	13.12
North Dakota	4.68	4.52	4.99	5.67	5.81	6.50	7.36	7.39
Ohio	5.75	6.25	6.75	6.20	6.31	7.40	8.29	8.46
Oklahoma	5.73	5.56	6.23	5.44	6.06	8.77	9.11	9.19
Oregon	6.44	6.09	6.21	6.01	6.28	6.59	7.34	7.54
Pennsylvania	8.03	9.60	8.33	7.75	7.87	8.98	10.93	11.68
Rhode Island	8.86	8.83	9.61	8.97	9.74	10.64	12.10	12.53
South Carolina	8.27	8.17	8.37	7.77	7.79	9.28	9.88	9.97
South Dakota	5.07	5.01	5.75	5.94	6.16	7.07	9.10	8.07
Tennessee	6.31	NA	6.91	6.66	6.68	8.26	8.74	8.93
Texas	6.58	5.42	6.32	5.59	6.40	8.00	8.55	8.78
Utah	5.73	5.83	5.13	5.29	5.70	4.65	5.59	5.98
Vermont	6.23	6.19	6.41	6.21	6.43	7.06	8.41	8.78
Virginia	8.05	8.11	8.60	7.90	8.80	10.85	12.04	12.20
Washington	NA	NA	5.64	5.68	5.75	5.83	5.86	5.88
West Virginia	6.78	6.81	6.81	5.87	6.63	6.02	8.96	9.68
Wisconsin	5.98	5.96	6.43	6.28	7.13	5.98	6.82	6.89
Wyoming	5.14	NA	4.58	6.16	5.26	5.54	6.29	6.59
Total	**6.40**	**6.47**	**6.94**	**6.54**	**6.86**	**7.69**	**8.84**	**8.99**

NA Not Available.

Notes: Data for 1997 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 22

Table 22. Average Price of Natural Gas Sold to Commercial Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet)

State	YTD 1999	YTD 1998	YTD 1997	1999		1998		
				February	January	Total	December	November
Alabama	6.59	6.57	6.89	6.93	6.33	6.65	7.18	7.53
Alaska	2.41	2.48	2.57	2.38	2.44	2.41	2.45	2.47
Arizona	6.16	5.62	5.05	6.18	6.15	5.95	6.25	6.38
Arkansas	4.92	5.16	5.27	5.27	4.70	NA	5.27	5.16
California	6.02	6.71	7.03	6.28	5.82	6.26	6.28	5.98
Colorado	4.14	4.13	3.68	4.12	4.16	NA	4.08	3.83
Connecticut	6.82	7.51	8.13	7.03	6.63	6.85	7.54	6.74
Delaware	6.64	6.71	6.36	6.59	6.68	7.07	6.93	6.93
District of Columbia	7.30	7.50	8.10	7.06	7.53	7.37	7.43	7.69
Florida	6.06	6.78	6.61	6.38	5.79	6.59	6.39	6.47
Georgia	2.15	6.01	6.58	2.35	2.00	5.93	2.75	3.34
Hawaii	12.67	14.38	14.74	12.49	12.86	13.18	12.83	13.04
Idaho	4.52	4.40	4.31	4.59	4.46	4.62	4.58	4.83
Illinois	4.48	4.55	5.78	4.48	4.47	4.92	4.68	4.84
Indiana	NA	5.72	5.31	NA	NA	NA	NA	4.85
Iowa	4.19	4.43	5.06	4.30	4.12	4.56	3.95	4.41
Kansas	NA	5.40	5.84	NA	NA	5.14	5.24	5.84
Kentucky	5.02	5.46	5.69	4.92	5.09	5.41	5.06	5.05
Louisiana	5.26	5.51	6.84	5.22	5.29	NA	6.06	6.19
Maine	6.62	7.41	7.91	6.79	6.48	NA	6.96	NA
Maryland	NA	6.26	6.99	NA	6.94	6.63	7.03	6.07
Massachusetts	NA	7.55	8.22	NA	NA	NA	NA	7.10
Michigan	4.66	4.77	4.98	4.68	4.65	4.84	4.72	4.64
Minnesota	4.30	4.47	5.49	4.25	4.33	4.40	4.38	4.27
Mississippi	NA	4.72	5.56	4.23	NA	4.47	4.69	3.52
Missouri	5.50	5.87	6.58	5.43	5.55	5.66	5.60	5.50
Montana	4.85	4.90	4.58	4.91	4.80	NA	5.05	5.24
Nebraska	4.08	4.56	5.60	4.00	4.14	NA	4.01	NA
Nevada	5.88	5.69	4.87	5.92	5.85	5.94	5.88	6.33
New Hampshire	7.01	7.59	8.59	7.15	6.89	NA	7.38	NA
New Jersey	NA	4.50	6.96	NA	NA	NA	NA	NA
New Mexico	2.80	3.93	4.44	3.40	2.45	3.95	3.05	3.34
New York	NA	NA	7.89	NA	NA	NA	NA	NA
North Carolina	6.33	6.89	7.59	6.44	6.25	6.62	7.15	6.89
North Dakota	4.13	4.07	4.15	4.04	4.19	4.33	4.29	4.31
Ohio	5.52	5.71	6.50	5.33	5.67	NA	5.73	5.74
Oklahoma	4.79	5.54	5.91	5.23	4.49	5.23	4.23	6.24
Oregon	5.53	5.03	4.54	5.56	5.51	NA	6.01	4.43
Pennsylvania	7.28	7.25	7.29	7.25	7.30	NA	6.75	6.63
Rhode Island	7.75	7.76	8.05	7.75	7.74	NA	8.02	8.11
South Carolina	6.83	6.92	7.51	6.94	6.75	6.45	6.73	6.58
South Dakota	4.02	4.11	4.47	4.16	3.92	4.42	3.97	4.24
Tennessee	5.75	NA	6.39	5.72	5.77	NA	5.94	5.97
Texas	4.37	4.99	5.54	4.28	4.44	4.52	4.43	4.40
Utah	4.17	4.45	3.78	4.14	4.20	4.35	4.54	4.69
Vermont	5.16	5.22	5.22	5.23	5.12	5.08	4.72	4.95
Virginia	5.96	6.37	6.78	6.04	5.90	6.08	6.14	6.19
Washington	NA	NA	4.66	NA	NA	NA	NA	NA
West Virginia	6.27	6.29	6.03	6.23	6.30	NA	6.18	6.12
Wisconsin	5.01	5.05	5.85	4.90	5.09	4.89	4.94	4.97
Wyoming	4.51	NA	3.47	4.47	4.55	NA	2.76	NA
Total	**5.15**	**5.58**	**6.16**	**5.18**	**5.12**	**5.47**	**5.22**	**5.26**

See footnotes at end of table.

Table 22. Average Price of Natural Gas Sold to Commercial Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet) — Continued

State	1998							
	October	September	August	July	June	May	April	March
Alabama	7.06	6.92	6.96	7.25	7.24	6.18	6.00	6.27
Alaska	2.32	3.22	2.15	2.08	2.05	2.24	2.31	2.39
Arizona	6.45	5.78	6.30	6.25	6.19	6.14	5.79	5.50
Arkansas	4.90	5.02	4.99	5.29	NA	5.31	5.23	5.04
California	5.64	5.83	5.88	5.50	5.91	5.68	6.65	7.06
Colorado	4.01	4.44	4.16	NA	4.44	4.21	4.05	4.04
Connecticut	5.49	5.44	5.53	4.66	5.88	7.03	6.86	7.42
Delaware	8.05	8.72	8.40	8.14	7.81	7.33	6.85	6.75
District of Columbia	7.49	7.35	7.14	6.98	6.97	6.99	7.09	7.46
Florida	6.38	6.27	6.22	6.55	6.70	6.83	6.71	6.69
Georgia	4.90	9.08	8.96	9.40	7.59	7.99	5.53	5.51
Hawaii	13.00	12.68	12.61	12.36	12.60	13.20	13.32	13.66
Idaho	4.91	4.94	4.88	4.90	4.83	4.77	4.76	4.46
Illinois	5.20	5.13	5.99	6.29	5.72	6.81	5.21	4.70
Indiana	5.28	NA	6.92	NA	NA	6.35	5.74	5.44
Iowa	5.02	6.38	6.27	7.53	4.17	5.48	5.19	3.72
Kansas	5.45	5.64	4.42	5.45	5.65	5.63	6.08	3.85
Kentucky	5.58	5.69	5.69	6.14	5.57	5.33	5.67	5.44
Louisiana	NA	5.82	5.68	5.85	NA	6.10	5.49	4.94
Maine	6.55	6.89	6.89	6.81	6.70	7.20	7.41	7.41
Maryland	7.74	7.27	7.40	7.88	7.02	7.35	7.06	6.16
Massachusetts	6.06	NA	6.45	6.22	6.55	6.86	7.65	7.46
Michigan	5.05	5.35	5.70	5.88	5.38	5.21	4.92	4.58
Minnesota	4.23	3.93	4.44	4.66	4.46	4.63	4.53	4.41
Mississippi	4.52	3.64	4.11	4.25	4.23	4.67	4.90	4.69
Missouri	6.17	5.71	6.04	5.93	5.65	5.52	5.37	5.27
Montana	5.73	6.23	5.86	6.06	5.47	NA	5.05	4.91
Nebraska	3.72	3.52	3.73	3.91	3.91	4.25	4.42	6.13
Nevada	6.61	6.92	6.90	6.08	5.91	5.75	5.76	5.69
New Hampshire	5.94	6.40	NA	6.59	NA	5.98	6.06	7.64
New Jersey	NA	NA	2.87	3.96	3.74	3.84	4.17	3.83
New Mexico	4.11	4.49	4.71	4.88	6.66	5.15	4.42	3.91
New York	NA	NA	4.68	5.67	5.01	NA	6.20	NA
North Carolina	6.23	6.26	6.28	6.45	6.16	6.18	6.09	6.45
North Dakota	4.39	4.73	7.28	4.72	4.86	4.54	4.16	4.17
Ohio	NA	7.19	7.81	NA	6.30	5.76	5.79	5.62
Oklahoma	5.34	5.39	5.34	5.39	5.24	4.97	4.57	5.27
Oregon	5.53	5.55	5.89	5.75	5.52	5.51	NA	NA
Pennsylvania	7.33	7.92	NA	8.03	8.25	8.23	NA	7.33
Rhode Island	8.65	9.14	9.35	8.98	8.88	8.37	NA	7.88
South Carolina	5.73	5.89	5.91	5.94	6.00	5.98	6.40	6.55
South Dakota	4.84	5.65	5.60	6.23	4.33	5.07	4.69	4.37
Tennessee	6.65	5.79	6.24	5.98	5.95	5.83	5.68	5.55
Texas	4.33	4.33	4.19	4.30	4.12	4.44	4.75	4.32
Utah	4.00	4.43	4.81	4.37	3.93	3.93	3.76	4.36
Vermont	4.81	4.63	5.17	4.91	5.30	5.98	5.14	5.10
Virginia	6.44	6.06	6.21	5.76	6.14	5.44	5.63	5.82
Washington	NA	NA	NA	NA	NA	NA	NA	NA
West Virginia	6.21	6.22	6.55	6.86	NA	7.34	6.60	6.32
Wisconsin	4.08	4.64	4.37	4.82	4.44	4.16	4.75	5.24
Wyoming	4.70	4.69	5.84	NA	NA	4.77	4.62	4.55
Total	**5.32**	**5.52**	**5.50**	**5.62**	**5.53**	**5.62**	**5.58**	**5.39**

See footnotes at end of table.

Table 22

Table 22. Average Price of Natural Gas Sold to Commercial Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet) — Continued

State	1998		1997					
	February	January	Total	December	November	October	September	August
Alabama	6.47	6.65	6.98	6.56	6.77	7.40	7.53	7.44
Alaska	2.45	2.49	2.44	2.55	2.53	2.52	2.28	2.09
Arizona	5.59	5.65	5.31	5.55	5.82	5.82	5.81	5.33
Arkansas	5.19	5.14	5.23	5.13	5.47	5.77	5.56	5.19
California	6.75	6.69	6.41	6.99	7.04	6.65	5.84	4.96
Colorado	4.07	4.18	4.06	4.43	4.39	4.72	4.01	4.70
Connecticut	7.28	7.73	7.23	7.48	7.59	6.36	6.48	5.14
Delaware	6.72	6.70	6.70	6.60	6.88	7.46	7.15	8.54
District of Columbia	7.34	7.65	7.37	3.15	8.77	8.07	8.10	7.19
Florida	6.72	6.83	6.85	7.22	7.32	7.04	6.85	6.54
Georgia	5.86	6.16	6.43	5.73	5.53	6.22	6.49	7.02
Hawaii	14.41	14.35	15.77	13.87	59.38	14.59	14.46	14.93
Idaho	4.40	4.41	4.49	4.35	4.68	4.75	4.75	4.85
Illinois	4.25	4.76	5.43	5.21	5.26	5.79	6.22	6.08
Indiana	5.97	5.52	5.44	5.11	4.96	4.97	6.10	6.12
Iowa	4.08	4.71	5.18	5.16	5.46	5.91	7.37	6.39
Kansas	5.39	5.41	5.38	5.14	5.72	5.63	5.42	4.65
Kentucky	5.63	5.32	5.79	5.92	6.03	5.42	5.90	5.95
Louisiana	5.24	5.73	6.22	5.91	7.00	7.14	6.03	5.66
Maine	7.41	7.41	7.70	7.79	7.62	6.84	7.61	7.16
Maryland	6.08	6.43	6.52	5.61	7.12	7.19	6.90	6.32
Massachusetts	7.73	7.39	7.34	8.03	7.74	5.63	5.45	5.65
Michigan	4.76	4.77	5.00	4.87	5.03	5.49	6.07	6.06
Minnesota	4.42	4.50	4.80	4.34	5.20	5.11	5.20	4.59
Mississippi	4.35	5.11	5.26	5.23	5.75	5.77	4.93	4.90
Missouri	5.63	6.08	5.88	6.23	6.08	6.16	5.74	5.22
Montana	4.97	4.85	4.83	5.39	3.92	5.54	4.52	5.89
Nebraska	4.44	4.66	4.88	5.35	5.41	5.27	4.34	3.77
Nevada	5.76	5.63	5.08	5.32	5.42	5.43	5.18	5.18
New Hampshire	7.57	7.60	7.63	7.77	7.81	6.14	6.25	6.45
New Jersey	4.13	4.85	5.88	4.97	5.34	4.92	4.30	4.54
New Mexico	4.35	3.66	4.01	3.25	3.52	4.14	4.51	4.67
New York	NA	NA	6.49	6.80	6.58	5.62	5.09	4.86
North Carolina	6.72	7.05	7.00	6.96	6.70	6.29	6.46	6.44
North Dakota	4.13	4.03	4.35	4.94	5.14	5.15	5.11	4.58
Ohio	5.43	5.96	6.23	5.86	5.97	6.14	6.45	6.73
Oklahoma	5.56	5.53	5.34	5.23	5.17	5.38	4.87	4.80
Oregon	5.17	4.92	4.63	4.66	4.73	4.65	4.80	4.87
Pennsylvania	7.36	7.14	7.35	6.89	6.83	7.25	7.68	8.04
Rhode Island	7.78	7.75	8.21	7.98	8.02	8.00	8.77	9.12
South Carolina	6.91	6.92	6.74	7.31	7.22	6.52	3.49	6.45
South Dakota	4.10	4.12	4.71	5.06	5.22	5.50	6.51	5.22
Tennessee	6.37	NA	6.11	6.36	6.27	6.33	6.05	5.99
Texas	5.37	4.66	4.91	4.99	5.27	4.96	4.72	4.54
Utah	4.35	4.54	3.92	4.39	4.65	3.78	3.99	4.02
Vermont	5.23	5.21	5.18	5.15	4.99	4.91	5.01	5.43
Virginia	6.33	6.41	6.45	6.37	6.42	6.55	6.58	6.56
Washington	NA	NA	4.73	4.78	4.81	4.87	4.90	5.29
West Virginia	6.31	6.28	6.34	6.18	6.24	6.76	7.54	8.13
Wisconsin	4.96	5.12	5.35	5.46	5.98	4.83	4.80	4.66
Wyoming	4.56	NA	3.93	5.52	4.62	5.08	4.55	4.43
Total	**5.56**	**5.59**	**5.79**	**5.70**	**5.85**	**5.73**	**5.57**	**5.43**

NA Not Available.

Notes: Data for 1997 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia. Average prices for gas delivered to commercial consumers reflect onsystem sales prices only. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy. See Table 25 for data on onsystem sales expressed as a percentage of both total commercial and total industrial deliveries. In 1996, consumption of natural gas for agricultural use is classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use. See Explanatory Note 5 for further explanation.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 23. Average Price of Natural Gas Sold to Industrial Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet)

State	YTD 1999	YTD 1998	YTD 1997	1999		1998		
				February	January	Total	December	November
Alabama	3.28	3.49	4.45	3.34	3.24	3.24	3.35	3.26
Alaska	1.19	1.54	1.56	1.18	1.20	NA	NA	NA
Arizona	3.45	3.63	4.04	3.42	3.48	3.39	3.52	3.37
Arkansas	3.43	3.70	4.16	3.48	3.40	3.44	3.76	3.32
California	NA	4.91	5.40	NA	4.02	3.59	3.45	3.48
Colorado	2.26	2.64	4.88	2.32	2.20	NA	2.31	2.41
Connecticut	4.44	5.13	5.91	4.39	4.49	4.32	4.55	4.19
Delaware	4.10	4.15	5.22	3.93	4.33	4.13	3.71	3.85
District of Columbia	0.00	0.00	0.00	—	—	0.00	—	—
Florida	3.87	4.46	4.46	3.93	3.81	4.30	3.97	4.18
Georgia	2.73	5.50	5.17	2.83	2.63	4.75	2.61	3.01
Hawaii	0.00	0.00	0.00	—	—	0.00	—	—
Idaho [a]	3.21	3.04	2.77	3.23	3.19	3.09	3.08	3.16
Illinois	3.77	4.18	5.27	3.71	3.81	3.93	3.78	3.61
Indiana	NA	4.49	4.43	NA	NA	NA	4.21	NA
Iowa	3.40	2.98	4.25	3.52	3.32	2.15	3.28	3.51
Kansas	NA	3.78	4.29	NA	NA	NA	NA	NA
Kentucky	NA	4.55	4.60	3.34	NA	3.78	3.74	3.24
Louisiana	1.41	2.56	3.76	1.95	1.15	NA	1.20	1.26
Maine	5.43	6.02	7.02	6.05	5.20	NA	6.07	NA
Maryland	NA	6.08	1.50	NA	5.25	5.31	5.31	4.76
Massachusetts	NA	6.75	7.61	NA	NA	NA	NA	NA
Michigan	3.79	4.00	3.93	3.66	3.92	3.99	3.96	3.60
Minnesota	2.84	3.13	4.15	2.81	2.86	2.85	3.01	2.82
Mississippi	NA	NA	4.22	3.11	NA	NA	3.30	2.84
Missouri	NA	5.01	5.74	NA	4.74	4.44	4.27	4.46
Montana	3.96	4.83	4.72	4.78	3.40	5.07	4.82	5.31
Nebraska	3.24	3.29	4.79	3.12	3.35	3.20	3.30	3.28
Nevada	4.50	5.98	8.78	4.50	4.50	4.74	4.59	4.53
New Hampshire	6.62	6.39	7.89	6.73	6.51	NA	4.95	NA
New Jersey	NA	3.57	5.18	NA	NA	NA	NA	NA
New Mexico	NA	3.24	2.75	2.64	NA	3.15	1.54	2.60
New York	NA	NA	6.44	NA	NA	NA	NA	NA
North Carolina	3.62	4.68	5.48	3.60	3.63	3.95	4.12	3.90
North Dakota	2.58	3.12	4.45	2.53	2.66	2.88	3.14	2.64
Ohio	5.29	5.35	5.30	5.13	5.42	NA	5.76	4.69
Oklahoma	3.47	4.14	5.08	3.50	3.45	3.71	3.49	3.39
Oregon	3.89	3.70	3.19	3.91	3.87	NA	4.25	3.50
Pennsylvania	4.54	4.68	5.11	4.45	4.60	4.27	4.26	4.10
Rhode Island	4.88	4.43	3.79	4.77	5.00	NA	3.85	3.68
South Carolina	3.07	3.53	4.55	3.15	3.00	3.24	3.25	3.17
South Dakota	3.13	3.28	4.53	3.12	3.13	3.27	3.10	3.12
Tennessee	3.71	NA	4.96	3.54	3.85	NA	3.88	3.79
Texas	2.06	2.54	3.73	2.02	2.10	NA	2.30	2.18
Utah	2.98	3.13	2.42	3.16	2.85	3.09	3.29	3.24
Vermont	2.85	3.03	3.23	2.75	3.00	2.80	2.61	2.30
Virginia	4.65	4.89	6.96	3.88	5.31	4.10	5.50	4.62
Washington	NA	NA	4.09	NA	NA	NA	NA	NA
West Virginia	2.77	2.82	3.25	2.82	2.68	NA	2.86	NA
Wisconsin	3.88	4.08	4.72	3.82	3.92	3.92	4.01	4.17
Wyoming	NA	NA	3.51	NA	3.74	NA	3.87	3.79
Total	**2.98**	**3.60**	**4.44**	**2.99**	**2.97**	**3.07**	**2.83**	**2.83**

See footnotes at end of table.

Table 23

Table 23. Average Price of Natural Gas Sold to Industrial Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet) — Continued

State	1998							
	October	September	August	July	June	May	April	March
Alabama	3.18	2.95	3.06	3.15	3.11	3.16	3.44	3.03
Alaska	NA	NA	NA	1.22	1.40	1.43	1.42	1.45
Arizona	3.11	3.22	3.20	3.36	3.51	3.44	3.45	3.33
Arkansas	3.24	3.04	3.09	3.47	3.28	3.28	3.39	3.78
California	2.77	3.46	3.28	3.48	3.38	2.88	3.97	3.31
Colorado	2.12	1.90	2.27	NA	NA	2.48	2.26	2.62
Connecticut	3.85	3.46	3.63	3.61	3.69	4.13	4.55	4.74
Delaware	3.75	4.39	5.12	4.32	4.35	4.32	4.63	3.79
District of Columbia	—	—	—	—	—	—	—	—
Florida	4.47	4.05	4.02	4.37	4.20	4.46	4.58	4.40
Georgia	3.86	4.51	5.06	3.85	4.90	5.30	5.15	5.18
Hawaii	—	—	—	—	—	—	—	—
Idaho [a]	3.02	2.94	3.32	2.97	3.10	3.09	3.10	3.25
Illinois	3.32	3.71	4.38	3.10	4.49	4.18	4.02	4.08
Indiana	NA	NA	NA	NA	4.53	4.51	4.77	4.56
Iowa	3.40	3.31	3.65	4.14	2.25	3.39	0.73	0.64
Kansas	2.76	2.35	2.71	2.78	3.05	3.53	3.56	3.61
Kentucky	3.71	3.66	3.71	3.61	3.48	3.21	3.85	3.79
Louisiana	NA	1.85	1.98	2.30	2.43	2.62	2.19	2.89
Maine	4.22	3.92	3.80	4.17	4.10	4.70	6.02	6.02
Maryland	4.21	5.86	4.57	8.24	5.60	4.54	5.10	5.88
Massachusetts	4.34	NA	4.36	4.83	4.89	4.66	6.64	6.77
Michigan	4.29	4.67	5.21	4.77	4.32	4.01	3.81	3.61
Minnesota	2.67	2.18	2.51	2.84	2.58	3.03	3.06	3.08
Mississippi	3.02	3.24	NA	NA	NA	NA	NA	NA
Missouri	4.16	4.13	4.15	3.72	4.56	4.25	4.30	4.27
Montana	5.54	11.14	7.57	6.88	3.72	5.89	5.22	5.02
Nebraska	2.86	2.56	2.72	3.20	3.34	3.34	3.35	3.34
Nevada	4.39	4.35	4.46	5.86	5.81	5.94	5.84	6.00
New Hampshire	2.82	3.67	NA	3.58	3.38	3.90	3.77	5.47
New Jersey	NA	NA	2.88	3.17	3.39	3.43	3.42	3.24
New Mexico	2.95	2.99	3.19	3.13	3.45	3.77	4.00	4.09
New York	NA	NA	NA	NA	3.92	NA	4.49	15.18
North Carolina	3.63	3.55	3.62	3.60	3.57	3.68	3.63	4.19
North Dakota	2.51	2.11	2.53	2.85	2.60	3.15	3.10	3.22
Ohio	5.78	5.78	7.46	NA	5.05	4.98	5.21	5.67
Oklahoma	3.64	3.40	3.44	3.41	3.43	3.13	3.32	4.12
Oregon	3.96	3.57	3.74	3.80	3.77	3.75	NA	NA
Pennsylvania	3.98	4.04	3.88	3.94	4.09	4.05	4.40	4.57
Rhode Island	3.93	3.08	2.98	3.59	3.58	NA	3.86	4.06
South Carolina	3.11	2.93	2.47	3.37	3.21	3.31	3.42	3.53
South Dakota	3.27	3.38	3.17	3.21	3.54	3.44	3.37	3.38
Tennessee	3.30	3.34	3.38	4.37	3.50	3.54	3.64	3.59
Texas	NA	1.87	2.15	2.53	2.24	2.44	2.49	2.49
Utah	3.03	3.08	3.36	3.20	2.78	2.90	2.95	3.05
Vermont	2.84	2.74	2.77	2.78	2.78	2.87	2.86	2.94
Virginia	4.00	3.16	3.33	3.61	3.44	3.01	3.45	4.08
Washington	NA	NA	NA	NA	NA	NA	NA	NA
West Virginia	2.93	NA	NA	3.02	2.88	2.96	2.97	2.90
Wisconsin	3.40	3.13	3.56	3.76	3.44	3.69	4.20	4.17
Wyoming	3.79	3.80	NA	NA	3.82	4.19	4.12	NA
Total	**2.76**	**2.64**	**2.73**	**3.00**	**2.96**	**3.10**	**3.22**	**3.41**

See footnotes at end of table.

Table 23. Average Price of Natural Gas Sold to Industrial Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet) — Continued

State	1998		1997					
	February	January	Total	December	November	October	September	August
Alabama	3.50	3.47	3.65	3.79	3.81	3.85	3.38	3.38
Alaska	1.52	1.56	1.54	1.56	1.55	1.54	1.57	1.56
Arizona	3.76	3.53	3.60	3.40	3.23	3.71	3.29	3.13
Arkansas	3.62	3.77	3.71	4.01	4.31	3.90	3.61	3.40
California	5.34	4.55	4.18	4.51	4.58	4.36	3.54	3.43
Colorado	2.58	2.69	3.66	3.79	4.91	4.07	3.31	3.15
Connecticut	5.13	5.12	4.73	5.10	4.94	4.33	4.06	3.85
Delaware	4.08	4.22	4.40	4.72	4.87	4.63	4.13	4.14
District of Columbia	—	—	—	—	—	—	—	—
Florida	4.29	4.59	4.41	4.70	4.96	4.78	4.56	4.41
Georgia	5.37	5.63	4.56	4.22	4.63	4.52	5.57	4.04
Hawaii	—	—	10.79	—	—	—	—	—
Idaho [a]	3.02	3.06	2.76	2.77	2.74	2.72	2.69	2.68
Illinois	4.12	4.22	3.97	4.17	4.80	3.77	3.23	3.78
Indiana	4.29	4.68	4.33	4.73	3.67	3.59	4.29	4.16
Iowa	2.42	3.43	4.11	4.55	4.53	4.41	3.89	3.51
Kansas	3.65	3.89	3.32	3.61	3.81	3.96	3.14	2.84
Kentucky	4.51	4.59	4.19	4.85	4.91	3.97	3.81	3.75
Louisiana	2.22	2.90	2.87	2.91	3.42	3.27	2.78	2.43
Maine	6.02	6.02	5.55	7.19	5.88	4.68	4.65	4.43
Maryland	5.59	7.46	3.25	3.76	3.64	2.99	3.33	3.07
Massachusetts	6.70	6.79	5.78	6.72	6.34	4.34	4.03	3.85
Michigan	4.11	3.90	4.02	4.02	4.07	4.33	3.99	4.35
Minnesota	3.00	3.25	3.28	3.24	3.87	3.83	3.10	2.77
Mississippi	3.22	NA	3.55	3.60	4.12	3.93	3.43	3.23
Missouri	4.69	5.30	4.78	5.48	4.23	4.51	4.03	4.03
Montana	4.85	4.82	4.79	4.85	4.80	4.91	4.90	4.90
Nebraska	3.27	3.30	3.85	4.08	4.44	4.28	3.59	3.48
Nevada	6.06	5.90	7.77	7.98	9.55	11.41	9.10	7.31
New Hampshire	5.84	7.08	4.90	7.36	6.48	4.50	3.61	3.43
New Jersey	3.42	3.71	3.78	3.99	4.24	3.79	3.43	2.11
New Mexico	5.69	2.18	2.99	2.14	2.81	3.57	3.10	2.91
New York	NA	NA	5.05	5.56	5.29	4.69	3.47	3.69
North Carolina	4.41	4.95	4.66	5.03	4.98	4.07	4.24	4.16
North Dakota	3.01	3.22	3.05	3.24	3.64	3.84	3.16	3.46
Ohio	5.06	5.62	4.93	4.84	4.79	4.31	4.80	4.65
Oklahoma	4.18	4.10	4.18	4.39	4.50	4.22	3.59	3.46
Oregon	3.73	3.67	3.03	3.32	3.10	2.86	2.78	2.69
Pennsylvania	4.55	4.80	4.61	4.62	4.32	4.36	4.13	4.04
Rhode Island	4.25	4.59	4.33	3.77	2.92	2.49	3.08	2.19
South Carolina	3.38	3.67	3.72	4.00	4.31	4.02	3.27	3.29
South Dakota	3.25	3.30	4.02	3.72	4.37	4.65	4.17	3.97
Tennessee	3.98	NA	4.18	4.81	4.72	4.47	3.95	3.51
Texas	2.44	2.66	2.82	2.76	3.54	3.33	2.69	2.32
Utah	3.19	3.06	2.55	3.02	2.90	2.73	2.54	2.73
Vermont	3.01	3.06	3.07	3.11	3.12	2.97	3.00	2.96
Virginia	4.99	4.81	4.68	5.20	4.73	3.92	4.32	4.32
Washington	NA	NA	3.16	3.08	3.38	2.86	2.69	2.71
West Virginia	2.87	2.78	2.91	2.87	2.88	2.97	2.93	2.82
Wisconsin	4.48	3.79	4.13	4.53	5.05	4.23	3.62	3.34
Wyoming	NA	3.29	3.49	3.65	3.66	3.42	3.42	3.44
Total	**3.52**	**3.68**	**3.59**	**3.79**	**4.07**	**3.69**	**3.25**	**2.90**

NA Not Available.
— Not Applicable.

Notes: Data for 1997 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia. Average prices for gas delivered to industrial consumers reflect onsystem sales prices only. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy. See Table 25 for data on onsystem sales expressed as a percentage of both total commercial and total industrial deliveries. In 1996, consumption of natural gas for agricultural use is classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use. See Explanatory Note 5 for further explanation.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 24

Table 24. Average Price of Natural Gas Delivered to Electric Utility[a] Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet)

State	1999	1998						
	January	Total	December	November	October	September	August	July
Alabama	2.22	2.55	2.68	2.47	2.62	2.46	2.50	2.63
Alaska	1.68	1.80	1.72	1.74	1.72	1.73	1.76	1.80
Arizona	2.32	2.43	2.38	2.77	2.11	2.33	2.28	2.41
Arkansas	2.04	2.28	2.35	—	2.25	2.15	2.05	2.49
California	2.70	2.79	2.96	2.86	2.56	2.50	2.83	2.92
Colorado	3.26	2.91	3.33	3.15	2.71	2.82	3.31	2.77
Connecticut	2.11	2.42	1.90	2.45	2.07	2.22	2.34	2.46
Delaware	3.34	2.89	3.34	3.24	2.66	2.41	2.66	3.47
District of Columbia	—	0.00	—	—	—	—	—	—
Florida	2.08	2.27	1.39	2.30	2.30	2.18	2.18	2.27
Georgia	4.83	3.19	2.11	2.67	3.80	4.00	2.82	3.18
Hawaii	—	0.00	—	—	—	—	—	—
Idaho	—	0.00	—	—	—	—	—	—
Illinois	2.27	2.25	2.12	2.31	2.20	2.01	1.95	2.27
Indiana	2.99	2.88	3.36	2.86	3.23	2.74	2.58	2.80
Iowa	3.62	3.00	3.38	3.11	2.93	2.91	2.80	3.01
Kansas	2.24	2.13	2.21	2.25	2.03	1.87	1.99	2.28
Kentucky	2.51	3.11	2.90	3.11	2.85	2.42	2.43	2.86
Louisiana	2.13	2.38	2.16	2.32	2.25	2.12	2.17	2.59
Maine	—	0.00	—	—	—	—	—	—
Maryland	3.52	2.77	2.64	3.85	3.13	2.53	2.49	2.84
Massachusetts	2.43	2.78	2.26	2.44	2.28	2.13	2.35	2.62
Michigan	2.07	1.23	1.25	1.10	1.46	1.67	1.38	1.34
Minnesota	3.02	2.42	3.43	2.69	2.32	2.00	2.41	2.48
Mississippi	2.05	2.32	1.97	2.28	2.21	2.16	2.16	2.47
Missouri	2.34	2.23	2.31	2.32	2.14	2.13	1.95	2.39
Montana	2.04	3.65	1.48	1.37	1.30	1.02	4.99	2.47
Nebraska	2.28	2.38	2.92	2.81	2.10	1.93	2.49	2.62
Nevada	2.20	2.37	2.01	2.61	2.33	2.42	2.42	2.34
New Hampshire	—	0.00	—	—	—	—	—	—
New Jersey	2.95	2.74	2.44	3.11	2.74	2.56	2.46	2.92
New Mexico	2.03	2.22	2.14	2.34	2.02	1.90	2.03	2.32
New York	2.80	2.56	2.43	2.80	2.30	2.21	2.29	2.63
North Carolina	3.34	2.73	3.93	3.59	3.00	2.53	2.55	2.92
North Dakota	—	0.00	—	—	—	—	—	—
Ohio	3.88	3.51	3.88	4.36	3.88	4.09	3.93	2.98
Oklahoma	2.32	2.47	2.28	2.50	2.41	2.16	2.07	2.52
Oregon	2.01	1.55	1.92	1.88	1.63	1.48	1.56	1.46
Pennsylvania	2.94	3.30	4.88	6.91	2.50	3.74	2.63	3.18
Rhode Island	—	3.38	—	—	—	—	3.40	3.38
South Carolina	3.00	3.60	4.05	3.71	3.21	3.37	3.53	3.58
South Dakota	—	1.77	—	—	—	1.77	—	—
Tennessee	—	0.00	—	—	—	—	—	—
Texas	2.10	2.30	2.24	2.25	2.16	2.05	2.11	2.46
Utah	2.24	2.11	2.45	2.42	2.20	1.95	2.04	2.15
Vermont	2.55	2.90	2.87	2.84	2.86	2.54	2.67	3.09
Virginia	3.18	3.04	4.03	3.72	3.09	2.76	2.60	3.02
Washington	—	2.79	—	—	—	—	—	—
West Virginia	3.19	3.53	3.02	3.25	1.20	2.94	3.85	6.31
Wisconsin	2.64	2.68	2.73	2.63	2.42	2.31	2.49	2.80
Wyoming	6.92	8.61	11.18	14.27	5.33	6.64	67.70	8.23
Total	**2.26**	**2.37**	**2.22**	**2.37**	**2.22**	**2.15**	**2.21**	**2.50**

See footnotes at end of table.

Table 24. Average Price of Natural Gas Delivered to Electric Utility[a] Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet) — Continued

State	1998						1997	
	June	May	April	March	February	January	Total	December
Alabama	2.49	2.62	2.69	2.55	2.44	2.86	2.86	2.90
Alaska	1.87	1.84	1.84	1.85	1.88	1.85	1.74	1.84
Arizona	2.79	3.20	2.82	3.07	2.56	2.84	2.99	2.86
Arkansas	2.33	2.33	2.56	2.36	2.16	2.25	2.69	2.24
California	2.70	2.94	2.71	2.85	2.79	2.94	3.08	2.96
Colorado	2.83	2.56	2.53	2.61	2.65	3.01	3.16	2.93
Connecticut	2.38	2.56	2.70	2.79	2.63	2.74	2.47	2.74
Delaware	3.27	1.34	1.41	4.15	3.21	5.34	3.15	4.28
District of Columbia	—	—	—	—	—	—	—	—
Florida	2.31	2.31	2.68	2.64	2.49	2.25	2.51	2.52
Georgia	2.91	3.72	1.94	1.72	2.88	2.35	2.72	4.97
Hawaii	—	—	—	—	—	—	—	—
Idaho	—	—	—	—	—	—	—	—
Illinois	2.37	2.37	2.55	2.34	2.28	2.25	2.55	2.48
Indiana	2.95	2.98	3.37	3.25	2.64	3.84	3.23	3.67
Iowa	2.86	3.16	3.14	3.35	3.00	3.36	3.41	2.99
Kansas	2.14	2.20	2.40	2.36	1.97	3.35	2.53	3.33
Kentucky	3.68	3.59	5.25	4.04	3.58	3.46	3.45	3.47
Louisiana	2.40	2.52	2.66	2.51	2.47	2.61	2.79	2.86
Maine	—	—	—	—	—	—	—	—
Maryland	2.93	2.96	3.33	3.18	3.32	3.75	2.97	3.61
Massachusetts	2.24	2.86	3.66	3.64	2.95	3.16	3.11	3.57
Michigan	1.29	1.20	1.35	0.75	0.84	0.51	0.79	0.47
Minnesota	2.42	2.74	2.76	2.83	2.62	2.63	2.44	2.99
Mississippi	2.36	2.41	2.56	2.46	2.46	2.48	2.72	2.80
Missouri	2.41	2.31	2.56	2.52	2.82	2.63	2.81	2.77
Montana	2.59	5.34	1.40	12.33	8.49	4.61	NA	4.18
Nebraska	2.37	2.40	1.98	2.72	4.47	2.72	2.86	4.94
Nevada	2.73	2.44	2.31	2.02	2.37	2.41	2.18	2.16
New Hampshire	—	—	—	—	—	—	2.71	—
New Jersey	2.73	2.77	3.05	2.88	2.83	2.98	3.06	3.20
New Mexico	2.20	2.33	2.41	2.39	2.30	2.43	2.64	2.55
New York	2.51	2.64	2.87	2.96	2.95	3.00	2.88	3.38
North Carolina	2.78	2.89	3.37	4.03	—	3.02	3.22	3.60
North Dakota	—	—	—	—	—	—	3.43	—
Ohio	2.79	3.06	4.01	4.14	3.16	3.32	3.72	4.13
Oklahoma	2.41	2.52	2.88	2.62	2.72	4.47	2.97	2.89
Oregon	1.31	1.50	1.36	1.23	1.03	1.14	1.49	1.48
Pennsylvania	2.32	5.37	5.94	2.69	2.64	2.79	3.02	3.16
Rhode Island	3.40	3.43	3.45	3.19	3.24	3.48	3.35	3.78
South Carolina	3.92	3.41	3.44	3.58	3.53	4.05	4.07	4.46
South Dakota	—	—	—	—	—	—	—	—
Tennessee	—	—	—	—	—	—	—	—
Texas	2.34	2.38	2.52	2.43	2.41	2.49	2.69	2.74
Utah	1.94	—	—	—	—	—	2.09	—
Vermont	2.81	3.03	3.08	2.81	2.77	3.02	3.16	3.42
Virginia	2.93	2.99	4.46	3.34	3.78	3.05	2.93	2.54
Washington	—	—	5.59	3.86	4.11	1.64	NA	5.73
West Virginia	2.62	3.58	—	—	—	5.59	3.35	3.31
Wisconsin	2.64	2.95	3.13	2.75	2.91	2.90	3.17	2.92
Wyoming	7.66	11.70	4.77	10.42	8.72	5.39	NA	1.63
Total	**2.40**	**2.47**	**2.59**	**2.53**	**2.51**	**2.64**	**2.74**	**2.77**

See footnotes at end of table.

Table 24

Table 24. Average Price of Natural Gas Delivered to Electric Utility[a] Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet) — Continued

State	1997							
	November	October	September	August	July	June	May	April
Alabama	3.70	3.75	2.88	2.56	2.51	2.65	2.44	3.21
Alaska	1.84	1.85	1.88	1.69	1.87	1.79	1.64	1.63
Arizona	4.00	3.11	3.37	2.63	2.20	3.03	3.11	4.47
Arkansas	3.12	3.12	2.89	2.64	2.38	2.40	1.92	1.98
California	3.64	3.40	3.14	2.77	2.68	2.77	2.60	2.66
Colorado	3.90	2.37	2.42	2.77	4.07	2.31	6.20	2.47
Connecticut	3.38	2.76	2.37	2.35	2.33	2.26	2.22	2.22
Delaware	2.58	5.69	3.40	3.00	2.83	1.95	3.68	2.53
District of Columbia	—	—	—	—	—	—	—	—
Florida	3.29	3.21	3.03	2.50	2.30	2.33	2.09	2.26
Georgia	3.33	3.94	3.07	2.27	2.75	3.13	2.64	2.64
Hawaii	—	—	—	—	—	—	—	—
Idaho	—	—	—	—	—	—	—	—
Illinois	3.31	3.13	2.82	2.39	2.31	2.37	2.29	2.12
Indiana	4.03	5.25	3.67	3.39	2.77	2.99	3.06	2.88
Iowa	4.16	3.81	3.28	3.12	2.70	3.28	2.89	2.79
Kansas	3.02	3.06	2.70	2.13	2.06	2.11	2.14	2.00
Kentucky	4.24	4.00	3.25	2.92	2.87	2.96	2.83	3.13
Louisiana	3.61	3.40	3.03	2.60	2.44	2.65	2.45	2.18
Maine	—	—	—	—	—	—	—	—
Maryland	4.10	3.91	3.42	2.89	2.35	2.69	2.98	3.14
Massachusetts	4.08	4.10	3.21	2.87	2.81	2.92	2.84	2.54
Michigan	1.08	1.58	0.73	0.58	0.96	0.89	0.42	0.61
Minnesota	3.72	3.67	3.56	2.43	2.43	2.34	2.30	2.34
Mississippi	3.51	3.35	3.02	2.61	2.46	2.52	2.37	2.27
Missouri	3.52	3.35	2.94	2.51	2.39	2.44	2.74	2.77
Montana	6.84	2.98	64.31	1.92	1.37	9.35	13.57	2.87
Nebraska	4.29	3.21	2.98	2.49	2.32	2.00	1.89	1.89
Nevada	2.80	2.64	2.39	2.02	1.98	2.09	1.99	2.02
New Hampshire	—	—	2.85	2.55	2.74	2.72	2.68	—
New Jersey	4.19	4.23	3.42	2.87	2.80	2.85	2.76	2.69
New Mexico	3.02	3.05	2.82	2.47	2.46	2.38	2.39	2.07
New York	3.83	3.37	2.89	2.60	2.58	2.65	2.62	2.53
North Carolina	4.95	3.68	3.38	3.09	3.12	2.87	2.64	2.79
North Dakota	—	—	—	—	4.00	—	4.14	3.98
Ohio	4.12	4.00	4.35	4.28	3.10	3.20	4.13	4.06
Oklahoma	4.05	3.46	3.20	2.49	2.37	2.63	2.91	2.57
Oregon	1.44	1.45	1.49	1.49	1.35	1.57	—	—
Pennsylvania	3.69	3.65	2.99	2.81	2.54	3.04	2.57	2.31
Rhode Island	4.05	4.02	3.32	3.04	2.98	3.21	3.09	2.82
South Carolina	4.00	4.10	4.54	4.54	4.35	3.51	3.84	3.87
South Dakota	—	—	—	—	—	—	—	—
Tennessee	—	—	—	—	—	—	—	—
Texas	3.33	3.15	2.85	2.50	2.39	2.46	2.34	2.14
Utah	—	2.00	2.66	1.79	1.86	4.82	—	—
Vermont	4.21	3.96	3.23	2.90	2.95	3.06	2.83	2.27
Virginia	4.09	4.73	3.77	2.95	2.58	2.93	3.05	2.71
Washington	5.16	4.21	8.62	0.67	4.83	3.83	7.21	5.93
West Virginia	3.00	3.29	3.41	3.71	3.79	3.23	3.22	3.63
Wisconsin	4.11	3.94	3.09	2.85	3.12	2.81	2.58	2.46
Wyoming	3.43	4.88	7.74	34.13	20.44	4.00	11.82	24.02
Total	**3.41**	**3.24**	**2.96**	**2.53**	**2.44**	**2.52**	**2.41**	**2.30**

[a] Includes all steam electric utility generating plants with a combined capacity of 50 megawatts or greater.

NA Not Available.

— Not Applicable.

Notes: Data for 1997 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Sources: Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Plants," and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1997-1999

State	YTD 1999		YTD 1998		YTD 1997		1999	
							February	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	79.4	17.2	78.3	18.7	83.7	24.2	77.4	16.1
Alaska	56.9	99.9	60.0	100.0	59.7	97.5	53.8	99.9
Arizona	85.5	33.1	87.0	30.1	87.6	19.7	84.6	34.0
Arkansas	92.5	10.8	95.4	10.7	96.5	13.1	91.4	10.6
California	54.2	12.9	56.2	9.9	58.6	10.7	52.6	14.4
Colorado	95.4	6.0	95.3	6.9	95.0	17.2	93.2	0.3
Connecticut	69.7	61.9	78.3	58.4	90.2	76.4	69.7	67.0
Delaware	100.0	21.0	100.0	27.4	100.0	32.4	100.0	24.0
District of Columbia	55.2	—	59.6	—	65.4	—	52.4	—
Florida	91.5	3.3	96.3	4.1	97.2	12.8	90.9	3.4
Georgia	83.7	9.9	89.5	16.6	93.9	32.0	81.6	9.7
Hawaii	100.0	—	100.0	—	100.0	—	100.0	—
Idaho	89.1	3.3	89.4	2.7	88.8	2.0	88.8	3.1
Illinois	46.6	10.4	52.3	10.3	59.5	14.2	46.1	10.0
Indiana	NA	NA	85.2	11.0	96.9	23.8	NA	NA
Iowa	85.8	8.7	88.0	7.2	90.9	9.5	84.7	8.0
Kansas	NA	NA	72.7	5.2	80.5	9.9	NA	NA
Kentucky	89.8	NA	88.3	14.4	92.1	25.3	89.2	18.0
Louisiana	96.0	11.0	67.2	5.7	96.9	11.7	95.9	7.8
Maine	100.0	94.7	100.0	97.9	100.0	100.0	100.0	97.3
Maryland	NA	NA	48.2	6.8	83.0	11.6	NA	NA
Massachusetts	NA	NA	62.8	19.8	68.5	25.0	NA	NA
Michigan	66.0	14.2	67.5	9.8	70.1	14.2	64.5	17.3
Minnesota	96.5	35.8	92.5	41.0	99.1	42.1	96.5	33.8
Mississippi	NA	NA	95.1	NA	97.0	40.7	96.9	38.2
Missouri	82.7	28.6	85.2	23.8	83.2	23.7	79.1	33.9
Montana	82.0	3.1	86.2	4.5	93.3	4.1	80.1	2.7
Nebraska	61.4	25.8	79.0	26.9	86.7	32.7	63.5	28.7
Nevada	71.0	11.7	78.4	2.6	78.5	2.3	69.2	30.9
New Hampshire	95.4	24.1	96.3	33.8	95.4	46.3	95.3	24.1
New Jersey	NA	NA	60.7	48.5	72.0	48.8	NA	NA
New Mexico	60.8	NA	68.0	8.5	79.6	29.7	52.8	3.6
New York	NA	NA	NA	NA	73.2	10.7	NA	NA
North Carolina	85.4	42.0	93.3	27.5	98.1	68.8	73.8	43.2
North Dakota	88.7	15.2	87.2	17.4	93.5	25.1	83.6	13.6
Ohio	52.2	3.8	60.4	4.5	71.4	10.1	47.1	3.6
Oklahoma	81.4	5.4	82.1	5.8	88.4	8.1	78.9	5.1
Oregon	99.1	16.5	99.3	15.1	98.9	20.6	99.0	16.0
Pennsylvania	61.5	12.8	58.0	15.7	70.9	16.9	56.4	11.1
Rhode Island	60.4	8.0	67.8	12.7	90.6	13.2	61.5	30.8
South Carolina	97.7	83.9	98.3	85.6	99.1	85.6	97.8	83.0
South Dakota	85.5	51.0	86.1	45.6	86.4	30.9	84.1	50.0
Tennessee	87.7	24.3	NA	NA	95.0	44.0	84.8	23.3
Texas	75.2	13.3	69.8	13.9	71.6	19.5	81.3	13.0
Utah	85.8	11.5	87.4	8.1	86.7	10.2	85.7	10.8
Vermont	100.0	81.5	100.0	100.0	100.0	100.0	100.0	81.5
Virginia	72.5	16.6	75.5	16.5	86.5	9.5	68.2	13.6
Washington	NA	NA	NA	NA	92.1	27.5	NA	NA
West Virginia	52.1	7.7	55.7	6.2	69.8	14.8	54.8	10.1
Wisconsin	79.8	24.1	83.2	25.0	89.0	35.6	78.8	22.5
Wyoming	96.9	3.5	NA	NA	90.8	2.3	97.3	4.2
Total	**70.1**	**15.9**	**71.5**	**15.2**	**78.6**	**20.7**	**68.3**	**15.3**

See footnotes at end of table.

Table 25

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1997-1999 — Continued

State	1999		1998					
	January		Total		December		November	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	81.0	18.4	69.4	15.5	68.2	16.7	66.0	15.7
Alaska	59.8	99.9	57.2	NA	55.5	NA	58.6	NA
Arizona	86.3	32.3	84.7	33.4	83.7	33.5	82.6	35.2
Arkansas	93.3	11.7	NA	9.5	66.0	10.0	56.0	11.3
California	55.7	11.8	43.1	10.8	43.6	12.0	33.6	10.8
Colorado	97.1	0.1	NA	NA	93.0	—	94.9	0.1
Connecticut	69.6	60.4	68.8	56.6	62.8	63.5	76.2	58.2
Delaware	100.0	18.1	100.0	21.8	100.0	24.4	100.0	22.7
District of Columbia	58.2	—	51.4	—	53.1	—	49.8	—
Florida	92.0	3.6	96.1	4.0	95.0	3.7	94.6	3.3
Georgia	85.4	10.1	81.9	12.5	77.6	10.7	75.3	9.5
Hawaii	100.0	—	100.0	—	100.0	—	100.0	—
Idaho	89.4	3.6	86.1	2.6	85.8	3.6	83.7	2.2
Illinois	46.9	10.9	46.9	8.5	44.0	11.4	44.1	9.1
Indiana	NA	NA	NA	NA	NA	8.7	75.5	NA
Iowa	86.7	9.2	82.1	10.0	88.3	10.4	82.9	10.1
Kansas	NA	NA	67.6	NA	58.9	NA	59.9	NA
Kentucky	90.3	NA	86.6	14.5	88.4	19.6	87.0	17.2
Louisiana	96.2	13.9	NA	NA	78.4	23.9	76.4	15.5
Maine	100.0	93.8	NA	NA	100.0	84.2	NA	NA
Maryland	39.3	5.9	37.6	6.3	36.7	9.8	54.1	8.7
Massachusetts	NA	NA	NA	NA	NA	NA	59.7	NA
Michigan	67.3	16.2	58.2	6.5	63.6	9.6	56.3	8.7
Minnesota	96.6	37.9	95.4	40.7	96.5	38.3	95.6	37.2
Mississippi	NA	NA	94.1	NA	95.8	34.8	94.7	34.8
Missouri	85.5	26.3	77.9	17.6	78.6	21.2	73.7	17.7
Montana	83.5	3.5	NA	2.6	79.9	2.4	78.1	2.3
Nebraska	59.8	23.5	NA	17.9	50.7	26.9	NA	20.9
Nevada	72.6	31.4	71.1	5.5	70.9	35.4	64.6	29.5
New Hampshire	95.5	24.2	NA	NA	95.3	24.4	NA	NA
New Jersey	NA	NA	NA	NA	NA	NA	NA	NA
New Mexico	66.7	NA	62.5	12.6	75.9	4.1	66.6	11.0
New York	NA	NA	NA	NA	NA	NA	NA	NA
North Carolina	97.0	41.1	88.8	25.4	88.4	25.9	85.2	27.1
North Dakota	92.4	18.4	84.2	14.2	87.5	18.9	86.5	19.3
Ohio	57.0	4.1	NA	NA	49.3	3.1	49.7	2.5
Oklahoma	83.2	5.7	73.1	3.5	72.5	5.0	65.2	3.6
Oregon	99.1	16.9	NA	NA	99.1	14.8	99.0	15.6
Pennsylvania	66.5	14.6	NA	13.4	64.1	13.4	61.0	13.5
Rhode Island	59.4	24.4	NA	NA	53.7	38.3	53.4	41.9
South Carolina	97.6	84.8	97.6	86.8	96.7	86.7	96.4	86.6
South Dakota	86.6	51.8	84.1	34.0	84.6	46.2	84.4	45.0
Tennessee	89.7	25.4	NA	NA	85.2	26.0	81.5	25.0
Texas	71.0	13.8	60.3	14.1	61.7	12.8	64.0	13.5
Utah	85.8	12.2	82.5	8.9	85.2	10.0	82.2	10.9
Vermont	100.0	81.4	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	76.4	20.7	70.8	12.5	74.2	14.8	69.6	15.7
Washington	NA	NA	NA	NA	NA	NA	NA	NA
West Virginia	49.9	5.5	NA	NA	50.9	7.1	38.6	NA
Wisconsin	80.6	25.4	71.1	19.4	76.7	20.9	69.9	20.5
Wyoming	96.5	4.3	NA	NA	97.7	3.1	NA	2.2
Total	**71.6**	**16.4**	**64.3**	**14.8**	**65.5**	**16.9**	**62.1**	**15.4**

See footnotes at end of table.

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1997-1999 — Continued

State	1998							
	October		September		August		July	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	63.6	14.7	69.1	14.2	72.0	12.9	71.8	14.5
Alaska	56.1	100.0	54.9	NA	57.0	NA	56.0	96.5
Arizona	79.5	36.6	83.4	33.3	82.7	32.6	84.1	32.8
Arkansas	45.5	11.4	44.2	10.4	46.1	8.7	48.8	7.7
California	32.4	11.6	28.4	9.3	24.6	8.2	31.4	9.5
Colorado	85.2	0.2	85.8	—	91.3	1.1	NA	NA
Connecticut	61.4	54.1	55.3	59.6	58.1	51.5	62.4	57.1
Delaware	100.0	17.8	100.0	17.5	100.0	11.3	100.0	17.8
District of Columbia	37.5	—	36.5	—	35.4	—	40.4	—
Florida	95.1	3.2	96.5	3.9	96.3	6.1	96.0	4.2
Georgia	72.2	9.4	71.1	14.4	68.9	7.0	68.9	5.1
Hawaii	100.0	—	100.0	—	100.0	—	100.0	—
Idaho	74.9	2.6	80.3	2.5	83.1	3.5	83.9	2.7
Illinois	40.5	8.2	43.2	7.0	37.9	6.0	35.4	4.9
Indiana	70.1	NA	NA	NA	60.2	NA	NA	NA
Iowa	76.2	7.2	76.8	6.4	79.7	5.2	69.6	5.3
Kansas	58.5	5.4	55.4	10.9	59.9	11.2	58.8	13.5
Kentucky	82.3	13.0	81.6	12.0	78.9	11.6	76.4	15.2
Louisiana	NA	NA	68.4	8.8	69.5	7.5	69.7	6.9
Maine	100.0	86.8	100.0	87.1	100.0	85.7	100.0	84.1
Maryland	25.6	8.3	23.1	3.5	22.7	7.2	22.2	2.7
Massachusetts	47.6	26.5	NA	NA	51.3	18.1	48.4	16.8
Michigan	45.9	5.1	41.1	5.0	35.9	3.8	38.1	4.4
Minnesota	97.5	35.5	98.3	78.1	98.1	36.9	97.2	34.8
Mississippi	94.3	33.8	93.8	27.1	96.2	NA	94.3	NA
Missouri	65.7	12.3	69.2	12.7	43.6	12.0	65.6	16.0
Montana	73.9	1.6	68.2	0.9	73.4	1.2	69.1	0.7
Nebraska	80.1	15.9	75.1	40.8	81.5	10.4	65.6	5.7
Nevada	63.7	27.4	56.6	20.7	56.4	19.1	66.3	4.0
New Hampshire	93.1	21.5	91.9	21.5	NA	NA	89.1	34.9
New Jersey	NA	NA	NA	NA	50.0	33.4	47.4	25.6
New Mexico	52.4	7.9	45.9	12.9	45.9	15.1	46.7	17.9
New York	NA	NA	NA	NA	45.7	NA	49.6	NA
North Carolina	80.3	21.1	82.3	18.0	83.8	21.3	83.3	26.4
North Dakota	81.1	21.5	68.6	13.4	67.7	8.3	80.8	11.0
Ohio	NA	1.5	41.7	1.2	35.3	0.8	NA	NA
Oklahoma	57.4	1.8	57.9	1.8	56.4	1.8	55.4	2.1
Oregon	98.4	12.2	98.7	12.0	98.7	12.2	98.9	12.8
Pennsylvania	54.4	11.4	57.4	12.1	NA	11.6	51.4	12.3
Rhode Island	49.2	34.6	49.3	33.7	100.0	34.2	48.5	31.2
South Carolina	96.4	87.5	96.7	88.3	96.8	88.1	97.4	87.5
South Dakota	95.7	33.9	73.5	20.8	74.8	17.1	75.4	22.5
Tennessee	68.2	14.9	66.7	19.9	63.0	21.3	63.7	20.3
Texas	47.7	15.1	57.7	15.8	54.4	14.7	48.8	12.1
Utah	80.2	10.2	77.6	9.2	71.6	8.7	70.7	7.5
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	61.6	8.7	57.6	8.5	50.8	13.2	69.4	8.4
Washington	NA	NA	NA	NA	NA	NA	NA	NA
West Virginia	29.7	8.1	28.9	NA	25.6	NA	7.6	96.9
Wisconsin	67.7	16.5	40.0	15.5	48.0	12.8	45.1	12.6
Wyoming	82.5	2.0	83.8	2.5	91.8	NA	NA	NA
Total	**55.0**	**14.1**	**52.9**	**14.4**	**49.5**	**13.5**	**51.0**	**12.7**

See footnotes at end of table.

Table 25

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1997-1999 — Continued

State	1998							
	June		May		April		March	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	74.7	14.5	35.4	13.3	80.2	14.8	77.8	17.4
Alaska	53.6	100.0	55.9	100.0	57.4	100.0	57.6	100.0
Arizona	86.2	33.8	83.3	35.8	84.9	32.7	86.7	34.0
Arkansas	NA	9.0	88.7	9.0	89.5	9.1	93.9	10.2
California	52.9	11.2	48.3	11.7	52.7	10.9	71.1	16.5
Colorado	91.8	NA	95.0	1.0	95.8	0.8	96.0	1.2
Connecticut	61.2	52.9	76.3	55.7	62.3	61.9	71.2	59.4
Delaware	100.0	19.3	100.0	19.5	100.0	23.3	100.0	27.9
District of Columbia	41.9	—	47.7	—	52.5	—	60.1	—
Florida	96.6	4.3	96.7	3.5	96.8	4.5	96.2	4.4
Georgia	79.0	15.1	82.0	15.7	85.5	13.4	87.5	17.2
Hawaii	100.0	—	100.0	—	100.0	—	100.0	—
Idaho	85.3	1.8	85.4	2.2	86.4	2.2	88.1	2.0
Illinois	45.8	5.2	34.8	6.8	44.3	9.1	55.3	10.6
Indiana	NA	4.2	76.7	6.2	87.9	11.4	88.6	12.3
Iowa	70.3	4.9	87.3	5.4	82.8	19.9	72.1	22.8
Kansas	54.2	10.8	67.5	7.7	69.5	5.6	76.9	5.5
Kentucky	82.6	13.8	84.2	14.7	85.7	14.7	90.0	13.1
Louisiana	NA	7.0	96.5	7.3	98.1	7.2	58.2	9.8
Maine	100.0	87.9	100.0	84.1	100.0	97.9	100.0	97.9
Maryland	25.2	3.8	27.8	6.7	32.2	2.3	45.7	8.3
Massachusetts	46.3	NA	52.8	28.8	60.0	27.5	65.5	29.0
Michigan	40.8	4.8	42.2	5.9	58.3	9.6	64.3	12.1
Minnesota	98.2	41.1	98.5	35.1	96.1	38.9	96.2	48.8
Mississippi	94.9	NA	93.6	NA	93.3	NA	89.6	NA
Missouri	69.4	13.0	75.7	14.0	82.0	17.4	83.3	21.5
Montana	75.3	4.4	NA	1.2	79.4	2.2	83.1	3.5
Nebraska	66.3	13.5	74.0	14.8	71.5	21.3	77.3	24.0
Nevada	70.9	4.6	71.9	4.8	73.2	5.8	75.9	7.1
New Hampshire	NA	32.7	94.3	38.9	96.2	47.0	96.1	39.1
New Jersey	51.5	27.7	46.0	26.4	55.2	29.2	62.4	29.5
New Mexico	39.7	13.9	48.8	10.0	57.3	6.5	66.7	1.5
New York	47.4	6.9	NA	NA	58.1	10.1	NA	10.1
North Carolina	82.5	24.3	86.7	26.9	90.6	31.2	91.1	26.6
North Dakota	82.1	10.4	79.2	6.1	80.0	12.3	87.0	17.0
Ohio	44.7	1.3	41.4	1.5	53.9	2.7	60.1	3.2
Oklahoma	63.6	2.2	70.4	2.9	75.0	4.9	77.7	5.2
Oregon	98.9	14.9	98.8	15.0	NA	NA	NA	NA
Pennsylvania	54.9	12.7	59.4	13.2	NA	13.3	57.7	14.2
Rhode Island	53.3	33.4	58.6	NA	NA	41.2	64.7	49.9
South Carolina	97.4	88.2	98.2	87.7	98.4	86.0	98.2	84.9
South Dakota	72.8	24.9	65.9	15.8	93.7	56.2	85.6	37.9
Tennessee	66.6	23.3	77.4	23.9	75.8	29.3	93.1	28.1
Texas	63.8	15.2	55.9	14.1	59.8	14.5	61.3	15.2
Utah	75.6	9.1	73.7	8.9	82.5	7.9	81.2	8.6
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	66.8	9.3	70.0	13.0	70.9	11.2	73.4	19.2
Washington	NA	NA	NA	NA	NA	NA	NA	NA
West Virginia	NA	8.2	29.0	8.5	50.3	5.8	51.9	6.1
Wisconsin	52.4	15.5	53.8	15.1	72.9	19.3	77.6	23.4
Wyoming	NA	2.3	89.8	1.8	92.1	3.4	87.4	NA
Total	**59.6**	**13.9**	**60.0**	**13.8**	**66.8**	**14.9**	**71.5**	**16.6**

See footnotes at end of table.

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1997-1999 — Continued

State	1998				1997			
	February		January		Total		December	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	80.1	17.8	76.7	19.4	64.7	24.6	80.9	27.9
Alaska	60.0	100.0	59.9	100.0	54.5	97.8	54.2	100.0
Arizona	87.2	27.7	86.9	32.3	84.6	25.1	85.2	33.0
Arkansas	95.3	10.9	95.5	10.5	94.2	10.5	95.9	10.4
California	54.3	8.7	58.1	11.0	50.7	8.9	52.9	9.3
Colorado	95.2	1.2	95.4	2.5	92.8	23.6	93.0	23.7
Connecticut	78.2	57.8	78.4	61.0	81.9	66.4	77.0	61.7
Delaware	100.0	28.6	100.0	26.4	100.0	31.0	100.0	28.1
District of Columbia	59.0	—	60.2	—	54.9	100.0	55.9	100.0
Florida	96.3	4.0	96.3	4.5	97.5	10.0	96.0	8.4
Georgia	90.3	16.7	88.7	16.5	89.1	26.7	91.6	32.7
Hawaii	100.0	—	100.0	—	100.0	100.0	100.0	100.0
Idaho	88.7	3.0	90.0	2.5	86.1	2.0	86.6	2.0
Illinois	50.4	9.8	53.7	10.7	54.3	11.5	52.1	11.9
Indiana	84.6	11.1	85.7	11.2	89.8	16.0	94.1	15.4
Iowa	88.7	7.1	87.4	7.4	88.2	8.6	89.3	9.3
Kansas	73.6	5.3	71.9	5.1	70.7	9.5	73.3	7.5
Kentucky	86.5	17.2	90.0	12.3	90.0	19.2	91.3	17.6
Louisiana	60.9	6.0	74.1	5.4	95.9	10.1	96.5	7.9
Maine	100.0	97.9	100.0	97.9	100.0	91.4	100.0	88.7
Maryland	49.5	10.6	47.1	3.4	67.1	7.4	52.7	1.1
Massachusetts	61.4	32.5	64.3	30.3	62.6	20.2	68.5	19.2
Michigan	65.2	12.6	69.5	13.5	63.7	9.0	65.6	11.8
Minnesota	93.3	37.4	91.9	45.0	98.8	40.4	98.5	40.9
Mississippi	94.8	38.5	95.3	NA	94.8	39.6	95.0	41.1
Missouri	85.4	24.0	85.2	23.7	79.9	21.8	82.6	23.3
Montana	83.1	4.3	88.3	4.7	91.4	3.1	92.8	3.7
Nebraska	78.0	23.2	79.9	30.1	74.2	27.0	77.2	25.6
Nevada	79.8	15.3	77.3	7.2	71.4	1.8	72.7	2.1
New Hampshire	96.2	37.2	96.4	30.4	92.4	48.8	93.9	32.4
New Jersey	62.1	34.6	59.4	31.7	56.2	47.0	52.0	49.0
New Mexico	63.8	1.8	71.1	8.2	74.6	5.7	81.5	7.8
New York	NA	NA	NA	NA	64.7	8.5	67.8	10.3
North Carolina	93.1	27.3	93.4	27.6	94.4	45.5	95.7	35.7
North Dakota	84.9	17.1	89.1	17.6	88.9	18.5	84.4	15.3
Ohio	60.2	4.7	60.5	4.5	65.6	5.7	67.1	7.3
Oklahoma	83.2	5.2	81.1	6.3	81.8	4.7	81.8	5.4
Oregon	99.2	15.3	99.3	19.7	98.5	16.3	98.4	16.0
Pennsylvania	57.2	15.2	58.7	16.3	63.6	14.2	63.9	15.3
Rhode Island	71.6	38.5	64.5	39.7	80.5	17.5	64.0	11.4
South Carolina	98.4	85.4	98.1	85.8	98.8	86.9	98.0	84.7
South Dakota	85.7	45.9	86.5	45.2	83.3	24.1	86.0	34.2
Tennessee	87.8	25.5	NA	NA	92.2	38.3	92.9	35.3
Texas	71.6	15.5	68.3	12.3	61.4	17.3	68.3	14.6
Utah	89.1	8.5	85.7	7.8	83.3	8.9	86.1	8.2
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	76.7	14.6	74.4	18.7	77.9	13.0	71.3	19.4
Washington	NA	NA	NA	NA	84.1	23.5	93.4	19.3
West Virginia	55.5	6.1	56.0	6.4	54.6	12.2	58.9	11.7
Wisconsin	80.3	23.8	85.4	26.0	82.1	27.1	83.1	26.6
Wyoming	80.3	NA	NA	1.5	84.2	2.5	96.2	2.7
Total	**70.9**	**15.3**	**72.0**	**15.1**	**70.8**	**17.7**	**72.8**	**17.2**

See footnotes at end of table.

Table 25

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1997-1999 — Continued

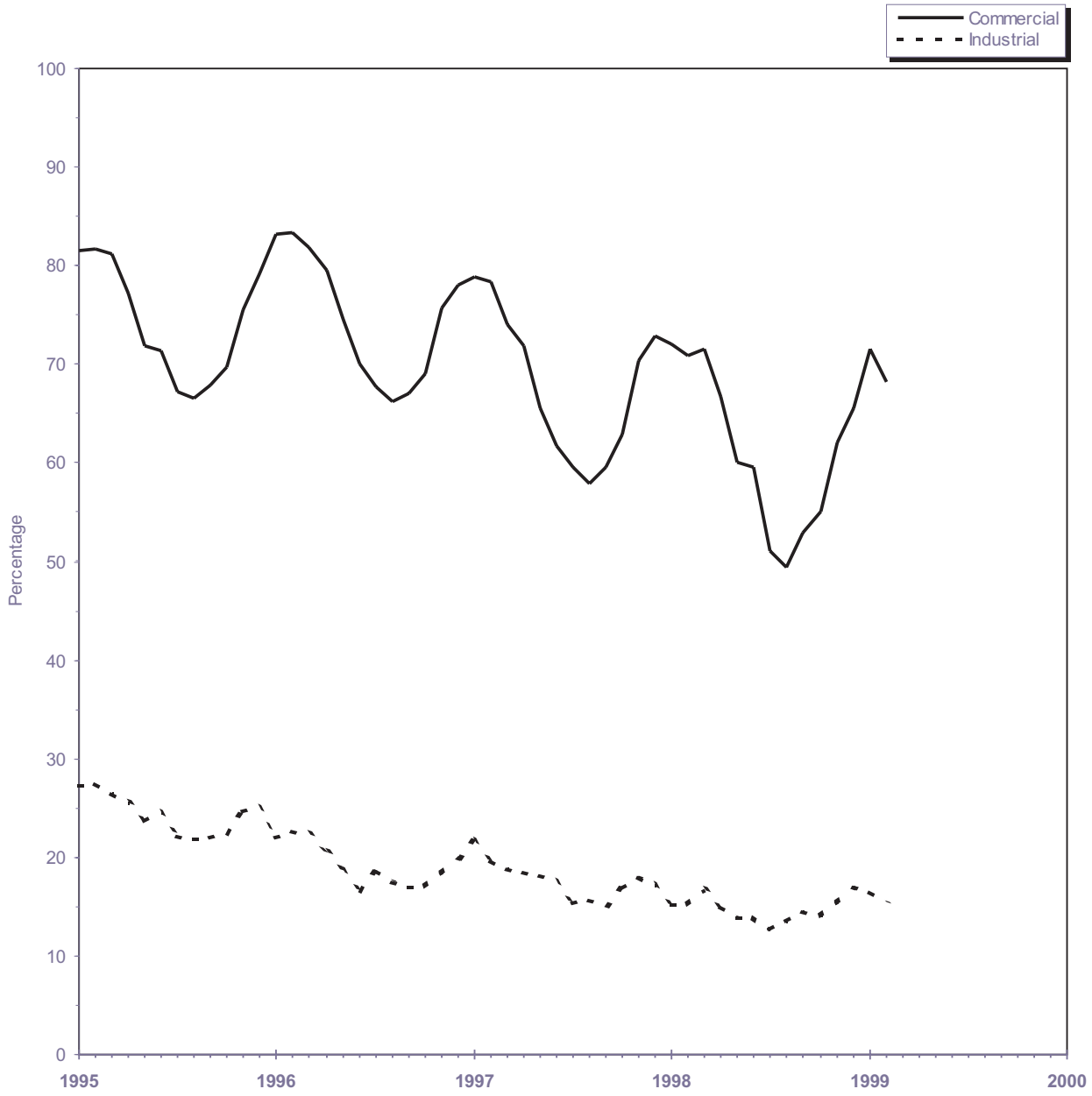
State	1997							
	November		October		September		August	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	69.1	26.4	51.0	24.5	40.8	24.3	31.8	24.7
Alaska	51.9	100.0	52.2	100.0	49.9	100.0	45.0	92.8
Arizona	83.2	31.2	81.1	30.2	83.9	29.5	78.7	29.3
Arkansas	90.4	11.2	92.6	9.7	91.3	8.3	91.8	7.3
California	49.4	7.4	41.9	6.1	41.0	8.6	41.7	7.2
Colorado	89.8	25.1	86.9	28.3	90.2	24.6	83.1	23.6
Connecticut	71.1	65.9	68.6	65.9	75.0	64.2	80.2	60.8
Delaware	100.0	28.0	100.0	29.9	100.0	27.7	100.0	28.4
District of Columbia	60.4	100.0	44.5	100.0	35.5	100.0	38.8	100.0
Florida	96.4	8.1	97.5	8.8	97.8	8.9	97.9	9.3
Georgia	88.6	27.6	85.6	30.8	82.9	15.5	81.9	26.1
Hawaii	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Idaho	83.2	1.8	76.4	1.5	82.5	1.7	82.9	1.4
Illinois	52.5	9.4	50.4	9.1	47.7	12.1	40.3	6.2
Indiana	96.0	22.6	93.9	16.1	87.2	10.3	86.8	9.5
Iowa	85.0	13.4	80.1	11.5	77.9	6.7	85.1	6.7
Kansas	66.0	9.9	73.6	9.9	57.3	10.9	52.2	11.9
Kentucky	89.9	18.7	89.9	19.5	84.9	16.3	80.3	14.4
Louisiana	95.1	9.3	94.7	9.9	94.3	9.0	95.1	9.9
Maine	100.0	91.4	100.0	88.4	100.0	86.7	100.0	87.6
Maryland	64.7	3.3	51.8	7.0	48.6	2.7	50.4	6.4
Massachusetts	62.9	21.0	48.7	16.8	43.8	16.6	41.3	13.6
Michigan	64.8	9.5	54.2	4.0	39.7	2.7	40.7	3.4
Minnesota	99.1	42.9	98.6	38.7	97.7	42.0	98.2	34.8
Mississippi	94.0	38.0	91.2	40.2	91.0	42.9	93.6	38.6
Missouri	78.3	23.8	68.6	19.7	68.3	22.6	68.4	17.0
Montana	90.5	2.8	88.1	2.3	85.7	1.9	87.5	1.9
Nebraska	72.3	41.2	50.0	22.2	63.2	26.5	69.2	18.6
Nevada	67.9	1.6	65.9	1.2	63.0	1.1	63.2	1.6
New Hampshire	89.1	34.2	85.7	44.2	87.2	49.6	88.1	47.0
New Jersey	48.2	48.3	47.0	42.8	47.2	43.6	47.8	57.0
New Mexico	78.0	6.8	67.0	4.6	63.3	7.0	63.7	8.8
New York	65.7	10.0	59.3	7.6	56.2	7.4	54.7	7.7
North Carolina	99.4	81.7	98.2	73.8	86.9	25.2	85.0	21.1
North Dakota	90.5	17.7	83.2	11.9	72.5	8.4	65.5	12.6
Ohio	67.3	6.1	55.1	2.7	50.5	2.2	49.3	2.9
Oklahoma	71.4	4.3	76.9	3.1	69.9	3.2	68.1	3.0
Oregon	98.4	14.5	97.5	14.1	98.0	12.1	98.3	11.4
Pennsylvania	63.8	14.8	50.1	12.6	57.8	12.1	58.4	12.4
Rhode Island	80.7	13.5	71.1	21.1	68.7	17.1	67.9	20.7
South Carolina	100.0	89.1	99.9	89.8	98.8	87.5	97.0	85.3
South Dakota	84.0	37.4	68.3	17.8	59.9	14.0	72.1	12.6
Tennessee	95.0	39.8	89.9	37.3	85.3	33.1	84.9	29.4
Texas	63.7	14.1	55.0	14.7	52.9	15.2	51.7	15.4
Utah	83.1	9.5	80.2	8.9	74.8	11.7	71.7	7.7
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	90.2	28.8	71.2	18.6	70.8	10.0	65.3	6.4
Washington	54.5	24.0	90.6	25.0	78.9	19.2	87.7	17.8
West Virginia	53.4	12.7	38.7	12.8	32.7	12.0	25.2	11.6
Wisconsin	85.9	27.6	69.3	24.3	62.9	21.3	55.4	19.6
Wyoming	88.2	1.8	87.9	2.7	87.2	3.1	84.9	2.7
Total	**70.4**	**18.0**	**62.9**	**16.8**	**59.5**	**15.1**	**57.9**	**15.6**

NA Not Available.
— Not Applicable.

Notes: Volumes of natural gas reported for the commercial and industrial sectors in this publication include data for both sales and deliveries for the account of others. This table shows the percent of the total State volume that represents natural gas sales to the commercial and industrial sectors. This information may be helpful in evaluating commercial and industrial price data which are based on sales data only. See Appendix C, Statistical Considerations, for a discussion of the computation of natural gas prices.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Figure 6. Percentage of Total Deliveries Represented by Onsystem Sales, 1995-1999



Sources: Energy Information Administration, Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers" and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Appendix A

Explanatory Notes

The Energy Information Administration (EIA) publishes monthly data for the supply and disposition of natural gas in the United States in the *Natural Gas Monthly* (NGM). The information in this Appendix is provided to assist users in evaluating the monthly data. There is a brief description of what data are estimated and what data are taken from submitted reports, followed by ten technical notes that provide important information for individual data series.

The monthly data are preliminary when initially published. Data shown in this report for the most current months are taken from the EIA Short-Term Integrated Forecasting System (STIFS) model computations. Each month, EIA staff review the STIFS model estimates and adjust them, if necessary, based on their knowledge of new developments in the natural gas industry. Data for prior months are estimated or taken from submitted reports.

Table A1. Methodology for Reporting Initial Monthly Natural Gas Supply and Disposition Data

Components	Reporting Methodology
Supply and Disposition	
Marketed Production	Reported on Form EIA-895 and Estimated from Historical Data
Extraction Loss	Derived from Marketed Production
Dry Production	Marketed Production minus Extraction Loss
Withdrawals from Storage	Reported on Form EIA-191
Supplemental Gaseous Fuels	Derived from Supply Estimates and Coal Gasification Information
Imports	Estimated from National Energy Board of Canada Information and Liquefied Natural Gas Information
Additions to Storage	Reported on Form EIA-191
Exports	Estimated from Industry Trends and Liquefied Natural Gas Information
Current-Month Consumption	Estimated from Historical Month-to-Month Percent Changes
Consumption by Sector	
Lease and Plant Fuel	Derived from Marketed Production
Pipeline Fuel	Derived from Estimates for Lease and Plant Fuel and Deliveries to Consumers
Residential	Estimated from Reports to the Sample Survey Form EIA-857
Commercial	Estimated from Reports to the Sample Survey Form EIA-857
Industrial	Estimated form Reports to the Sample Survey Form EIA-857
Electric Utilities	Reported of Form EIA-759

For data that are not taken from STIFS computations, Table A1 below lists the methodologies for deriving the monthly data to be published.

The STIFS model contains a series of calculations that produce forecasts for all of the energy industry. It is driven primarily by three sets of inputs or assumptions: estimates of key macroeconomic variables, world oil price assumptions, and assumptions about the severity of weather. The natural gas estimates also reflect other key inputs or assumptions including gas wellhead prices, electric power generation by other energy sources, and U.S. gas import capacity. The macroeconomic variable estimates are produced by DRI/McGraw-Hill but are adjusted by EIA to reflect EIA assumptions about the world price of oil, energy product prices, and other assumptions which may affect the macroeconomic outlook. The EIA publishes forecasts for the energy industry each quarter in the *Short-Term Energy Outlook*.

For production, total supply and disposition, and storage data (Tables l, 2, and 9), the most current two months shown are estimates produced from STIFS computations, and data that are two months or more prior to the date of publication are estimated or taken from submitted reports. For example, in the March issue of the NGM, February and March data are taken from the STIFS model computations while January and prior months data are estimated from available data sources or reported directly on EIA forms. For consumption data by sector (Table 3), the most current three months shown are estimates produced from STIFS computations while data that are three months prior to date of publication are taken from EIA forms.

Note 1. Nonhydrocarbon Gases Removed

Annual Data

Data on nonhydrocarbon gases removed from marketed productioncarbon dioxide, helium, hydrogen sulfide, and nitrogenare reported by State agencies on the voluntary Form EIA-895. For 1995, of the 33 producing States, 22 reported data on nonhydrocarbon gases removed. The 22 States accounted for 60 percent of total 1995 gross withdrawals. Of the 22 States reporting nonhydrocarbon gases removed, 11 reported zero values: Alaska, Arizona, Arkansas, Colorado, Illinois, Maryland, Missouri, Nevada, New York, South Dakota, and Virginia. The ten States reporting volumes greater than zero are Alabama, California, Florida, Kentucky, Mississippi, Nebraska, New Mexico, North Dakota, Texas, and Wyoming. In addition, Kansas, Louisiana, Montana, and Oklahoma, which together accounted for 40 percent of gross withdrawals, did not report nonhydrocarbon gases removed separately. However, their gross withdrawal data excluded all or most of the nonhydrocarbon gases removed on leases. No estimates are made for States not reporting nonhydrocarbon gases removed.

Preliminary Monthly Data

All monthly data are considered preliminary until after publication of the *Natural Gas Annual* for the year in which the report month falls. Seven States report monthly data on nonhydrocarbon gases removed: Alabama, Arizona, Mississippi, New Mexico, North Dakota, Oregon and Texas. Monthly data for California, Colorado, Florida, and Wyoming are estimated based on annual data reported on Form EIA-895. Nonhydrocarbon gases as an annual percentage of gross withdrawals reported by each of the six States is applied to each State's monthly gross withdrawal data to produce an estimate of nonhydrocarbon gases removed.

Final Monthly Data

Beginning with report year 1990, States filing the Form EIA-627, "Annual Quantity and Value of Natural Gas Report," were asked to supply monthly breakdowns of all data previously reported on an annual basis. The sums of the reported figures were used to calculate monthly volumes. In 1997 the Form EIA-627 was discontinued. States were requested to file an annual schedule on the monthly Form EIA-895, "Monthly Quantity and Value of Natural Gas Report."

For States not supplying monthly data on the annual schedule of the EIA-895, final monthly data are calculated by proportionally allocating the differences between total annual data reported on the Form EIA-895 and the sum of monthly data (January-December).

Note 2. Supplemental Gaseous Fuels

Annual Data

Annual data are published from Form EIA-176.

Preliminary Monthly Data

All monthly data are considered preliminary until after the publication of the *Natural Gas Annual* for the year in which the report month falls. Monthly estimates are based on the annual ratio of supplemental gaseous fuels to the sum of dry gas production, net imports, and net withdrawals from storage. This ratio is applied to the monthly sum of these three elements to compute a monthly supplemental gaseous fuels figure.

Final Monthly Data

Monthly data are revised after publication of the *Natural Gas Annual*. Final monthly data are estimated based on the revised annual ratio of supplemental gaseous fuels to the sum of dry gas production, net imports, and net withdrawals from storage. This ratio is applied to the revised monthly sum of these three elements to compute final monthly data.

Note 3. Production

Annual Data

Natural gas production data are collected from 33 gas-producing States on Form EIA-895 which includes gross withdrawals, vented and flared, repressuring, nonhydrocarbon gases removed, fuel used on leases, marketed production (wet), and extraction loss. The U.S. Minerals Management Service (MMS) also supplies data on the quantity and value of natural gas production on the Gulf of Mexico and Outer Continental Shelf. No adjustments are made to the data.

Estimated Monthly Data

State marketed production data for a particular month are estimated if data are unavailable at the time of publication. The data are estimated based on final monthly data reported on the Form EIA-895 for the previous year.

Estimates for total U.S. marketed production are based on final monthly data reported on the Form EIA-895 for the previous year. State estimates for nonhydrocarbon gas removed, gas used for repressuring, and gas vented and flared are based on the ratio of the item to gross withdrawals as reported on the EIA-895. These ratios are applied to the month's estimates for gross withdrawals to calculate figures for nonhydrocarbon gases removed, gas used for repressuring, and gas vented and flared. Estimates for gross withdrawal data are calculated from final monthly data filed on Form EIA-895 for the previous year.

Preliminary Monthly Data

All monthly data are considered preliminary until after publication of the *Natural Gas Annual* for the year in which the report month falls. Preliminary monthly data are published from reports from the Form EIA-895 and the MMS. Volumetric data are converted, as necessary, to a standard 14.73 psia pressure base. Data are revised as Table 7 monthly data are updated.

Final Monthly Data

Final monthly data for 1993, 1994, and 1995 are the sums of monthly data reported on the annual Form EIA-627, "Annual Quantity and Value of Natural Gas Report." For prior years, the differences between each State's annual production data reported on the EIA-627 and the sum of its monthly IOGCC reports for the year were allocated proportionally to the monthly IOGCC data.

Note 4. Imports and Exports

Annual Data and Final Monthly Data

Annual and final monthly data are published from the Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports*, which requires data to be reported each quarter by month for the calendar year.

Preliminary Monthly Data - Imports

Preliminary monthly import data are based on data from the National Energy Board of Canada and responses to informal industry contacts and EIA estimates. Preliminary data are revised after the publication of the article "U.S. Imports and Exports of Natural Gas" for the calendar year.

Preliminary Monthly Data - Exports

Preliminary monthly export data are based on historical data from the Office of Fossil Energy, U.S. De-

partment of Energy, *Natural Gas Imports and Exports*, informal industry contacts, and information gathered from natural gas industry trade publications. Preliminary monthly data are revised after publication of "U.S. Imports and Exports of Natural Gas" for the calendar year in which the report month falls.

Note 5. Consumption

All Annual Data

All consumption data except electric utility data are from the Form EIA-857 and Form EIA-176. No adjustments are made to the data. Electric utility data are reported on Form EIA-759.

Monthly Data

All monthly data are considered preliminary until after publication of the *Natural Gas Annual*.

Total Consumption

Preliminary Monthly Data

The most current month estimate is calculated based on the arithmetic average change from the previous month for the previous 3 years. The following month this estimate is revised by summing the components (pipeline fuel, lease and plant fuel, and deliveries to consumers).

Final Monthly Data

Monthly data are revised after publication of the *Natural Gas Annual*. Final monthly total consumption is obtained by summing its components.

Residential, Commercial, and Industrial Sector Consumption

Preliminary Monthly Data

Preliminary monthly residential, commercial, and industrial data are from Form EIA-857. See Appendix C, "Statistical Considerations," for a detailed explanation off sample selection and estimation procedures.

Average Price of Deliveries to Consumers

Price data are representative of prices for gas sold and delivered to residential, commercial, and industrial consumers. These prices do not reflect average prices of natural gas transported to consumers for the account of third parties or "spot-market" prices.

Final Monthly Data

Monthly data are revised after the publication of the *Natural Gas Annual*. Final monthly data are estimated by allocating annual consumption data from the Form EIA-176 to each month in proportion to monthly volumes reported in Form EIA-857.

Agricultural Use

Beginning with the reporting of 1996 annual data, the EIA changed the customer category used for reporting deliveries to consumers in the agricultural industry from commercial to industrial. In 1995 and earlier years, consumption of natural gas for agricultural use was classified as commercial use. Separate reports of the volumes affected are not available so the direct impact of this change is not known. Most natural gas consumed in agriculture is used to drive irrigation systems and to dry crops.

For the reporting of monthly data, the customer category will not be changed until 1998. In 1996, the monthly data reported under the old classification were adjusted to the annual data reported under the new classification. Monthly 1997 data will be adjusted in the same way as the 1996 data.

In comparing sectoral use over time, note that:

There is an inherent shift in natural gas volumes from the commercial to industrial sectors due simply to changes in the reporting requirements. This break in series may indicate a spurious increase in industrial consumption with a corresponding decrease in the commercial sector.

The sum of natural gas volumes consumed by the commercial and industrial sectors will not be changed by this modification of the instructions.

Electric Utility Sector Consumption

All Monthly Data

Monthly data published are from Form EIA-759.

Pipeline Fuel Consumption

Preliminary Monthly Data

Preliminary data are estimated based on the pipeline fuel consumption as an annual percentage of total consumption from the previous year's Form EIA-176. This percentage is applied to each month's total consumption figure to compute the monthly estimate.

Final Monthly Data

Monthly data are revised after the publication of the *Natural Gas Annual.* Final monthly data are based on the revised annual ratio of pipeline fuel consumption to total consumption from the Form EIA-176. This ratio is applied to each month's revised total consumption figure to compute final monthly pipeline fuel consumption estimates.

Lease and Plant Fuel Consumption

Preliminary Monthly Data

Preliminary monthly data are estimated based on lease and plant fuel consumption as an annual percentage of marketed production. This percentage is applied to each month's marketed production figure to compute estimated lease and plant fuel consumption.

Final Monthly Data

Monthly data are revised after publication of the *Natural Gas Annual.* Final monthly plant fuel data are based on a revised annual ratio of lease and plant fuel consumption to marketed production from Form EIA-176. This ratio is applied to each month's revised marketed production figure to compute final monthly plant fuel consumption estimates. Final monthly lease data are collected on the Form EIA-627 and estimates from the Form EIA-176. See the *Natural Gas Annual* for a complete discussion of this process.

Note 6. Extraction Loss

Annual Data

Extraction loss data are calculated from filings of Form EIA-64A, "Annual Report of the Origin of Natural Gas Liquids Production." For a fuller discussion, see the Natural Gas Annual.

Preliminary Monthly Data

Preliminary data are estimated based on extraction loss as an annual percentage of marketed production. This percentage is applied to each month's marketed production to estimate monthly extraction loss.

Final Monthly Data

Monthly data are revised after the publication of the *Natural Gas Annual.* Final monthly data are estimated by allocating annual extraction loss data to each month based on its total natural gas marketed production.

Note 7. Natural Gas Storage

Underground Natural Gas Storage

All monthly data concerning underground storage are published from the EIA-191. A new EIA-191 became effective in January 1994. Injection and withdrawal data from the EIA-191 survey are adjusted to correspond to data from Form EIA-176 following publication of the *Natural Gas Annual.*

Underground and Liquefied Natural Gas Storage

The final monthly and annual storage and withdrawal data for 1991 through 1995 shown in Table 2 include both underground and liquefied natural gas (LNG) storage. Underground storage data are obtained from the EIA-191 and EIA-176 surveys in the manner described earlier. Annual data on LNG additions and withdrawals are taken from Form EIA-176. Monthly data are estimated by computing the ratio of each month's underground storage additions and withdrawals to annual underground storage additions and withdrawals and applying it to annual LNG data.

Types of Underground Storage Facilities

There are three principal types of underground storage facilities in operation in the United States today: salt caverns (caverns hollowed out in salt "bed" or

"dome" formations), depleted fields (depleted reservoirs in oil and / or gas fields), and aquifer reservoirs (water-only reservoirs conditioned to hold natural gas). A storage facility's daily deliverability or withdrawal capability is the amount of gas that can be withdrawn from it in a 24-hour period. Salt cavern storage facilities generally have high deliverability because all of the working gas in a given facility can be withdrawn in a relatively short period of time. (A typical salt cavern cycle is 10 days to deplete working gas, and 20 days to refill working gas.) By contrast, depleted field and aquifer reservoirs are designed and operated to withdraw all working gas over the course of an entire heating season (about 150 days). Further, while both traditional and salt cavern facilities can be switched from withdrawal to injection operations during the heating season, this is usually more quickly and easily done in salt cavern facilities, reflecting their greater operational flexibility.

Note 8. Average Wellhead Value

Annual Data

Form EIA-895 requests State agencies to report the quantity and value of marketed production. When complete data are unavailable, the form instructs the State agency to report the available value and the quantity of marketed production associated with this value. A number of States reported volumes of production and associated values for other than marketed production. In addition, information for several States which were unable to provide data was obtained from Form EIA-176. It should be noted that Form EIA-176 reports a fraction of State production. The imputed value of marketed production in each State is calculated by dividing the State's reported value by its associated production. This unit price is then applied to the quantity of the State's marketed production to derive the imputed value of marketed production.

Preliminary Monthly Data

Preliminary values for the monthly U.S. Natural gas wellhead price are estimated from the prevailing cash market prices at 5 major trading hubs: Henry Hub, LA; Carthage, TX; Katy, TX; Waha, TX; and Blanco, NM. These prices appear initially in the trade publication, *Natural Gas Week* , and they reflect the spot delivered-to-pipeline, volume-weighted average prices for natural gas bought and sold at the specified trading hubs. Prices include processing, gathering, and transportation fees to the hubs. The estimated wellhead prices are derived with a statistical procedure based on analysis of monthly time series data for the period 1995 through 1997. The preliminary estimates are replaced when annual survey data become available. This procedure was adopted beginning with publication of the February 1999 issue of the *Natural Gas Monthly* and it affects price estimates from January 1998 to the present.

Final Monthly Data

The Form EIA-895 requests State agencies to report monthly values of marketed production. Preliminary monthly gas price data are replaced by these final monthly data.

Note 9. Balancing Item

The "balancing item" category represents the difference between the sum of the components of natural gas supply and the sum of the components of natural gas disposition. These differences may be due to quantities lost or to the effects of data reporting problems.

Reporting problems include differences due to the net result of conversions of flow data metered at varying temperatures and pressure bases and converted to a standard temperature and pressure base; the effect of variations in company accounting and billing practices; differences between billing cycles and calendar periods; and imbalances resulting from the merger of data reporting systems, which vary in scope, format, definitions, and type of respondents.

Annual Data

Annual data are from the *Natural Gas Annual*. For an explanation of the methodology involved in calculating annual "balancing item" data, see the *Natural Gas Annual*.

Preliminary Monthly Data

Preliminary monthly data in the "balancing item" category are calculated by subtracting dry gas production, withdrawals from storage, supplemental gaseous fuels, and imports from total supply / disposition.

Note 10. Heating Degree-Days

Degree-days are relative measurements of outdoor air temperature. Heating degree-days are deviations of the mean daily temperature below 65 degrees Fahrenheit. A weather station recording a mean daily temperature of 40 degrees Fahrenheit would report 25 heating degree-days. There are several degree-day data bases maintained by the National Oceanic and Atmospheric Administration. The information published in the Natural Gas Monthly is developed by the National Weather Service Climate Analysis Center, Camp Springs, Maryland.

The data are available weekly with monthly summaries and are based on mean daily temperatures recorded at about 200 major weather stations around the country. The temperature information recorded at these weather stations is used to calculate Statewide degree-day averages weighted by gas home customers. The State figures are then aggregated into Census Divisions and into the national average.

Appendix B

Data Sources

The data in this publication are taken from survey reports authorized by the U.S. Department of Energy (DOE), Energy Information Administration (EIA) and by the Federal Energy Regulatory Commission (FERC). The EIA is the independent statistical and analytical agency within the DOE. The FERC is an independent regulatory commission within the DOE which has jurisdiction primarily in the regulation of electric utilities and the interstate natural gas industry. The EIA conducts and processes some of the surveys authorized by the FERC. Data are collected from two annual surveys and four monthly surveys.

The annual reports are the Form EIA-176, a mandatory survey of all companies that deliver natural gas to consumers or that transport gas across State lines, and the Form EIA-627, a voluntary survey completed by energy or conservation agencies in the gas-producing States.

The monthly reports include two surveys of the natural gas industry and two surveys of the electric utility industry. The natural gas industry survey is the Form EIA-191 filed by companies that operate underground storage facilities, and the Form EIA-857 filed by a sample of companies that deliver natural gas to consumers. The electric utility industry surveys are the Form EIA-759 filed by all generating electric utilities and the Form FERC-423 filed by fossil fueled plants. Responses to these four monthly surveys are mandatory.

A description of the survey respondents, reporting requirements, and processing and editing of the data is given on the following pages for each of the surveys.

Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition"

Survey Design

The original version of Form EIA-176 was approved in 1980 with a mandatory response requirement. Prior to 1980, published data were based on voluntary responses to Bureau of Mines, U.S. Department of the Interior predecessor Forms BOM-6-1340-A and BOM-6-1341-A of the same title.

In 1982, the scope of the revised EIA-176 survey was expanded to collect the number of electric utility consumers in each State, volumes of gas transported to industrial and electric utility consumers, detailed information on volumes transported across State borders by the respondent for others and for the responding company, and detailed information on other disposition. These changes were incorporated to provide more complete survey information with a minimal change in respondent burden. The 1982 version of the Form EIA-176 continues to be the basis for the current version of this form.

In 1988, the Form EIA-176 was revised to include data collection for deliveries of natural gas to commercial and industrial consumers for the account of others. A short version of Form EIA-176 was also approved in 1988. Companies engaged in purchase and delivery activities but not in transportation and storage activities may file the short form. Usually, these companies are municipals handling small volumes of gas.

In 1990, the Form EIA-176 was revised to include more detailed information for gas withdrawn from storage facilities, gas added to storage facilities, deliveries of company-owned natural gas and natural gas transported for the account of others. The revised

form was approved for use beginning with report year 1990.

Upon the Office of Management and Budget's approval in 1993, the Form EIA-176 was again revised. All deliveries to consumers are now categorized as firm or interruptible. Commercial and industrial consumers are further categorized as nonutility power producers or as those excluding nonutility power producers.

Data reported on this form are no longer considered proprietary. Response to the form continues to be mandatory.

Survey Universe and Response Statistics

The Form EIA-176 is mailed to all identified interstate and intrastate natural gas pipeline companies, investor and municipally owned natural gas distributors, underground natural gas storage operators, synthetic natural gas plant operators, and field, well, or processing plant operators that deliver natural gas directly to consumers (including their own industrial facilities) and / or that transport gas to, across, or from a State border through field or gathering facilities.

Each company and its parent company or subsidiaries were required to file if they met the survey specifications. The original mailing in 1996 for report year 1995 totaled 1,991 questionnaire packages. To this original mailing, 11 names were added and 61 were deleted as a result of the survey processing. Additions were the result of comparisons of the mailing list to other survey mailing lists. Deletions resulted from post office returns and determinations that companies were out of business, sold, or not within the scope of the survey. After all updates, the survey universe was 1,941 responses from approximately 1,800 companies.

Following the original mailing, second request mailing, and nonrespondents follow-up, 1,911 responses were entered into the data base, and there were 30 nonrespondents.

Summary of Form EIA-176 Data Reporting Requirements

The EIA-176 is a multiline schedule for reporting all supplies of natural gas and supplemental gaseous fuels and their disposition within the State indicated. Respondents file completed forms with EIA in Washington, DC. Data for the report year are due by April 1 of the following year. Extensions of the filing deadline for up to 45 days are granted to any respondent on request.

All natural gas and supplemental gaseous fuels volumes are reported on a physical custody basis in thousand cubic feet (Mcf), and dollar values are reported to the nearest whole dollar. All volumes are reported at 14.73 pounds per square inch absolute pressure (psia) and 60 degrees Fahrenheit.

Routine Form EIA-176 Edit Checks

A series of manual and computerized edit checks are used to screen the Form EIA-176. The edits performed include validity, arithmetic, and analytical checks.

The incoming forms are reviewed prior to keying. This prescan determines if the respondent identification (ID) number and the company name and address are correct, if the data on the form appear complete and reasonable, and if the certifying information is complete.

Manual checks on the data are also made. Each form is prescanned to determine that data were reported on the correct lines. The flow of gas through interstate pipelines is checked at the company level to ensure that each delivery from a State is matched with a corresponding receipt in an adjoining State.

After the data are keyed, computer edit procedures are performed. Edit programs verify the report year, State code, and arithmetic totals. Further tests are made to ensure that all necessary data elements are present and that the data are reasonable and internally consistent. The computerized edit system produces error listings with messages for each failed edit test. When problems occur, respondents are contacted by telephone and required to file amended forms with corrected data.

Other EIA Publications Referencing Form EIA-176

Data from Form EIA-176 are also published in the *Natural Gas Annual*.

Form EIA-895, "Monthly Quantity of Natural Gas Report"

Survey Design

In 1996, an annual schedule was added to the Form EIA-895 to replace the Form EIA-627. Data collection on the Form EIA-895 began in January 1995. This form was designed to replace the Interstate Oil and Gas Compact Commission (IOGCC) form, "Monthly Report of Natural Gas Production." In 1994, the IOGCC decided to discontinue collection of their form. All gas producing States are requested to report on the Form EIA-895; a voluntary report. Data are reported by State agencies. The form was designed to provide a standard reporting system, to the extent possible, for the natural gas data reported by the States. Data are not considered proprietary.

Beginning with 1980, natural gas production data previously obtained on an informal basis from State conservation agencies were collected on Form EIA-627. This form was designed by EIA to collect annual natural gas production data from the appropriate State agencies under a standard data reporting system within the limits imposed by the diversity of data collection systems of the various producing States. The form was redesigned in 1990 to collect monthly breakdowns of all annual data elements. Data are not considered proprietary. It was also designed to avoid duplication of effort in collecting production and value data by producing States and to avoid an unnecessary respondent burden on gas and oil well operators. In 1993, value and associated volume of marketed production by month was added to the EIA-627. In 1996, the Form EIA-627 was discontinued. The information is collected on an annual schedule on the Form EIA-895.

Survey Universe and Response Statistics

Form EIA-895 is mailed to energy or conservation agencies in all 33 natural gas producing States. All producing States participate voluntarily in the EIA-895 survey by filing the completed form or by responding to telephone contacts.

Reports on State production are due 20 days after the end of the report month. (In most cases, the data are not available to the States until after this time period. Therefore, States are requested to send the report within 80 days after the end of the report month.) The annual schedule of the Form EIA-895 is due with the December data report.

Summary of Data Requirements

The Form EIA-895 monthly schedule consists of nine questions on one page, and requires volumetric information on gross production (gas and oil wells individually), gas used for repressuring, gas vented and flared, nonhydrocarbon gases removed, natural gas used as fuel on leases, marketed production, value based marketed production and the value in dollar amount of the marketed production.

Form EIA-895 annual schedule collects data on the monthly and annual production volume of natural gas (including gross withdrawals from both gas and oil wells); volumes returned to formation for repressuring, pressure maintenance, and cycling; quantities vented and flared; quantities of nonhydrocarbon gases removed; quantities of fuel used on leases; marketed production; the value of marketed production; and the number of producing gas wells.

Respondents are asked to report all volumes in thousand cubic feet at the State's standard pressure base and at 60 degrees Fahrenheit. All dollar values are reported in thousands.

Routine Form EIA-895 Edit Checks

Each filing of Form EIA-895 is manually checked for reasonableness and mathematical accuracy. Information on the forms is compared to totals of monthly data reported. Volumes are converted, as necessary, to a standard 14.73 psia pressure base. Reasonableness of data is assessed by comparing reported data to the previous year's data. State agencies are contacted by telephone to correct errors. Amended filings or resubmissions are not a requirement, since participation in the survey is voluntary.

Other EIA Publications Referencing Form EIA-895

Data from Form EIA-895 are also published in the EIA publication, *Natural Gas Annual.*

Appendix B

EIA-191 Survey, "Underground Natural Gas Storage Report"

Survey Design

The Form EIA-191, "Underground Natural Gas Storage Report," was revised effective January 1994. Among the changes from the form used from 1991 through 1993 are a distinction between a monthly and annual survey. Prior to 1991, data on the storage of natural gas were collected on a survey jointly implemented in 1975 by the Federal Power Commission (FPC), the Federal Energy Administration (FEA), and the Bureau of Mines (BOM) as the FPC-8/FEA-G-318 system. The data received on both the FPC-8 and FEA-G-318 were computerized and aggregated by FPC. The form was previously revised in 1991 to include storage data by State, field, and reservoir.

At the beginning of 1979, the EIA assumed responsibility for the collection, processing, and publication of the data gathered in the survey. Form FEA-G-318 was renewed on July 1, 1979, as Form EIA-191 and the survey was retitled the FPC-8/EIA-191 Survey (Figure D4 shows the EIA-191). Form FPC-8 was renewed in December 1985 and the survey retitled FERC-8/EIA-191 Survey. The forms were not merged because of FERC's stated desire to maintain the separate identity of the FERC-8 for administrative reasons. In September 1995, the FERC discontinued the reporting requirements of Form FERC-8. FERC jurisdictional firms will continue to file Form EIA-191.

Survey Universe and Response Statistics

The 103 companies that operate underground facilities will file the Form EIA-191. Of these companies, 42 are subject to the jurisdiction of FERC and are required to report data on Form EIA-191.

The response rate as of the filing deadline is approximately 20 percent. Data from the remaining 80 percent of respondents are received in writing and/or by telephone within 3 to 4 days after the filing deadline. All data supplied by telephone are subsequently filed in writing, generally within 15 days of the filing deadline. The final response rate is 100 percent.

Summary of EIA-191 Data Reporting Requirements

The EIA-191 monthly schedule contains current month and prior month's data on the total quantities of gas in storage, injections and withdrawals, the location (including State and county, field, reservoir) and peak day withdrawals during the reporting period. Prior month's data are required only when data are revised. Information on co-owners of storage fields has been eliminated. The annual schedule contains type of facility, storage field capacity, maximum deliverability and pipelines to which each field is connected. The annual schedule is filed with the January submission.

Collection of the survey is on a custody basis. Information requested must be provided within 20 days after the first day of each month. Twelve reports are required per calendar year. Respondents are required to indicate whether the data reported are actual or estimated. For most of the estimated filings, the actual data or necessary revisions are reflected in the prior month section of the monthly form. Actual data on natural gas injections and withdrawals from underground storage are based on metered quantities. Data on quantities of gas in storage and on storage capacity represent, in part, reservoir engineering evaluations. All volumes are reported at 14.73 psia and 60 degrees Fahrenheit.

Routine Form EIA-191 Edit Checks

Data received on Form EIA-191 are entered into the survey processing system. The survey's five principal data elements (total, base, working gas in storage, injections, and withdrawals) receive a preliminary visual edit to eliminate and correct obvious errors or omissions. Respondents are required to refile reports containing any inconsistencies or errors.

Other EIA Publications Referencing Form EIA-191

The EIA publication *Monthly Energy Review* and *Winter Fuels Report* contain data from the EIA-191 survey.

"Quarterly Natural Gas Import and Export Sales and Price Report"

Survey Design

The collection of data covering natural gas imports and exports was begun in 1973 by the Federal Power Commission (FPC). On October 1977, FPC ceased to exist and its data collection functions were transferred to the Federal Energy Regulatory Commission (FERC) within the Department of Energy (DOE). From 1979 to 1994, the Energy Information Administration (EIA) has had the responsibility for collecting Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." Data are not considered proprietary. The Form FPC-14 was discontinued in 1995.

Beginning in 1995, import and export data are taken from the "Quarterly Natural Gas Import and Export Sales and Price Report." This report is prepared by the Office of Fossil Energy, U.S. Department of Energy, based on information submitted by all firms having authorization to import or export natural gas.

Survey Universe and Response Statistics

All companies are required, as a condition of their authorizations to import or export natural gas, to file quarterly reports with the Office of Fossil Energy. These data are collected as part of its regulatory responsibilities. The data are reported at a monthly level of detail. Data reported on the Form FPC-14 represented physical movements of natural gas. Data collected by the Office of Fossil Energy are reported on an equity (sales) basis. For 1994 and earlier years, comparisons of the data from the two sources may show differences because reporting requirements were different. Prior to 1995, the Form FPC-14 was filed annual-ly by each organization or individual having authority to import and export natural gas regardless of whether any activity took place during the reporting year. Authorizations to import and export was originally granted by the FPC. In 1977, the authority to grant authorizations transferred to the Economic Regulatory Administration (ERA). It now resides with the Office of Fossil Energy, U.S. Department of Energy.

Routine Edit Checks

Respondents are required to certify the accuracy of all data reported. The data are checked for reasonableness and accuracy. If errors are found, the companies are required to file corrected data. The data are compared with data reported by the National Energy Board of Canada and are published quarterly. All natural gas volumes in this report are expressed at a pressure base of 14.73 pounds per square inch absolute and temperature of 60 degrees Fahrenheit, except as noted. All import and export prices are in U.S. dollars and, except for LNG exports, are those paid at the U.S. border. LNG export prices are those paid at the point of sale and delivery in Yokohama, Japan.

Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers"

Survey Design

The original Form EIA-857 was approved for use in December 1984. Response to the Form EIA-857 is mandatory on a monthly basis. Data collected on the Form EIA-857 cover the 50 States and the District of Columbia and include both price and volume data. Data are considered proprietary.

Survey Universe and Response Statistics

A sample of 382 natural gas companies, including interstate pipelines, intrastate pipelines, and local distribution companies, report to the survey. The sample was selected independently for each of the 50 States and the District of Columbia from a frame consisting of all respondents to Form EIA-176 who reported deliveries of natural gas to consumers in the residential, commercial, or industrial sectors. Each selected company is required to complete and file the Form EIA-857 on a monthly basis. Initial response statistics on a monthly basis are as follows: responses received by due date, approximately 50 percent, and responses received after follow-up, 100 percent. Virtually all are received in time for incorporation in the current month's processing cycle. When a response is extremely late, and the company represents less than 25 percent of the natural gas volumes delivered by all sampled companies in the State, values are imputed as described in Appendix C. When the company's submission is eventually received, the submitted data are used for future processing and revisions.

The Form EIA-857 is a monthly sample survey of firms delivering natural gas to consumers. It provides data that are used to estimate monthly sales of

natural gas (volume and price) by State and monthly deliveries of natural gas on behalf of others (volume) by State to three consumer sectors - residential, commercial, and industrial. (Monthly deliveries and prices of natural gas to electric utilities are reported on the Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Plants," and the Form EIA-759, "Monthly Power Plant Report.") See Appendix C for a discussion of the sample design and estimation procedures.

Summary of Form EIA-857 Data Reporting Requirements

Data collected monthly on the Form EIA-857 on a State level include the volume and cost of purchased gas, the volume and cost of natural gas consumed by sector (residential, commercial, and industrial), and the average heat content of all gas consumed. Respondents file completed forms with EIA in Washington, DC on or before the 30th day after the end of the report month.

All natural gas volumes are reported in thousand cubic feet at 14.73 psia at 60 degrees Fahrenheit and dollar values are reported to the nearest whole dollar.

Routine Form EIA-857 Edit Checks

A series of manual and computerized edit checks are used to screen the Form EIA-857. The edits performed include validity and analytical checks.

Appendix C

Statistical Considerations

The monthly sales (volume and price) and monthly deliveries (volume) of natural gas to residential, commercial and industrial consumers presented in this report by State are estimated from data reported on the Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers." (See Appendix B for a description of this Form.) These estimations must be made from the reported data since the Form EIA-857 is a sample survey. A description of the sample design and the estimation procedures is given below.

Sample Design

The Form EIA-857 is a monthly sample survey of companies delivering natural gas to consumers. It includes inter- and intrastate companies, and producers, as well as local distribution companies. The survey provides data that are used each month to estimate the volume of natural gas delivered and the price for onsystem sales of natural gas by State to three consumer sectors—residential, commercial, and industrial. Monthly deliveries and prices of natural gas to electric utilities are reported on the Form EIA-759, "Monthly Power Plant Report," and the Form FERC-423, "Monthly Report of Costs and Quality of Fuels for Electric Plants."

Sample Universe. The sample currently in use was selected from a universe of 1,538 companies. These companies were respondents to the Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," for reporting year 1995 who reported sales or deliveries to consumers in the residential, commercial or industrial sectors. (See Appendix B for a description of the Form EIA-176.)

Sampling Plan. The goal was a sample that would provide estimates of monthly natural gas consumption by the three consuming sectors within each State and the District of Columbia. A stratified sample using a single stage and systematic selection with probability proportional to size was designed. The measure of size was the volume of natural gas physically delivered in the State to the three consuming sectors by the company in 1995. There were two strata—companies selected with certainty and companies selected under the systematic probability proportional to size design.

Initial calculations showed that a 25 percent sample of companies would yield reasonably accurate estimates. The sample was selected independently in each State, resulting in a national total of 387 respondent companies. Unlike previous years, no mergers or acquisitions were uncovered as a result of the initial mail-out. Therefore there was no need for either substitution of respondent companies or a reduction in the total number of respondents.

Certainty Stratum. Since estimates were needed for each of the 50 States and the District of Columbia, the strata were established independently within each State. In 16 States and the District of Columbia where sampling was not feasible due to small numbers of companies and/or small volumes of gas deliveries, all companies were selected. The 16 States were: Alaska, Connecticut, Delaware, Hawaii, Idaho, Maine, North Dakota, New Hampshire, New Jersey, Nevada, Oregon, Rhode Island, South Dakota, Utah, Vermont, and Washington.

For each of the remaining States, the total volumes of industrial sales and deliveries and of the combined residential/commercial sales and deliveries were determined. Companies with natural gas deliveries to the industrial sector or to the combined residential/commercial sector above a certain level were selected with certainty. Since a few large companies often account for most of the natural gas delivered within a State, this ensures those companies' inclusion in the sample. The formula for determining certainty was applied independently in the two

consumer sectors—the industrial and the combined residential/commercial. These selected companies, together with the companies in the jurisdictions discussed where sampling was not feasible, formed the certainty stratum.

All companies with natural gas deliveries in sector j greater than the cut-off value ($C_{.j}$) were included in the certainty stratum. The formula for $C_{.j}$ was:

$$C_{.j} = \frac{X_{.j}}{2n} \qquad (1)$$

where:

$C_{.j}$ = cutoff value for consumer sector j,

n = target sample size to be selected for the State, 25 percent of the companies in the State,

X_{ij} = the annual volume of natural gas deliveries by company i to customers in consumer sector j,

$X_{i.}$ = the sum within State of annual gas volumes for company i,

$X_{.j}$ = the sum within State of annual gas volumes in consumer sector j,

$X_{..}$ = the sum within State of annual gas volumes in all consumer sectors.

Noncertainty Stratum. All other companies formed the noncertainty stratum. They were systematically sampled with probability proportional to size. The measure of size for each company was the total volume of gas sales to all consumer sectors ($X_{i.}$). The number of companies to be selected from the noncertainty stratum was calculated for each State, with a minimum of 2.

The formula for selecting the number of noncertainty stratum companies was:

$$m = n\frac{X2}{X_{..}} \qquad (2)$$

where:

m = the sample size for the noncertainty stratum within a State,

X2 = the sum within State of the Xi. for all companies in the noncertainty stratum.

Companies were listed in ascending order according to their measure of size and then a cumulative measure of size in the stratum was calculated for each company. The cumulative measure of size was the sum of the measures of size for that company and all preceding companies on the list. An interval of width I for selecting the companies systematically was calculated using.

A uniform random number R was selected between zero and $\left(I = \frac{X2}{m}\right)$. The first sampled company was the first company on the list to have a cumulative measure of size greater than R. The second company selected was the first company on the list to have a cumulative measure of size greater than R + I. R + I was increased again by I to determine the third company to be selected. This procedure was repeated until the entire sample was drawn.

Subgroups. In eight States, the noncertainty stratum was divided into subgroups to ensure that gas in each consumer sector could be estimated. The systematic sample with probability proportional to size design described above was applied independently in each subgroup. The methods for determining the subgroup sample size and calculating the subgroup interval for sample selection were the same as the methods described above for the noncertainty stratum, except that X2 was the sum within State of the $X_{i.}$ for only those companies in the subgroup.

These subgroups were defined only for the purpose of sample selection. They are:

California: companies handling only industrial gas and all other companies.

Iowa: companies handling industrial gas and companies delivering only to residential or commercial customers.

Louisiana: companies handling only industrial gas and all other companies, with the latter being further subdivided according to size. The larger group is comprised of all companies with total deliveries of at least 200 million cubic feet while the smaller group consists of companies with less than that volume of delivered gas (three subgroups).

Oklahoma: Companies delivering less than 500 million cubic feet of gas and those delivering more than that volume.

Texas: companies handling only residential/commercial gas, companies handling only industrial gas, and all other companies (three subgroups).

Estimation Procedures

Estimates of Volumes. A ratio estimator is applied to the volumes reported in each State by the sampled companies to estimate the total gas sales and deliveries for the State. Ratio estimators are calculated for each consumer sector—residential, commercial, and industrial—in each State where companies are sampled. The following annual data are taken from the most recent 1995 submissions of Form EIA-176:

The formula for calculating the ratio estimator (E_{vj}) for the volume of gas in consumer sector j is:

$$E_{vj} = \frac{Y_{.j}}{Y'_{.j}} \qquad (3)$$

where:

Y_j = the sum within State of annual gas volumes in consumer sector j for all companies,

Y'_j = the sum within State of annual gas volumes in consumer sector j for those companies in the sample.

The ratio estimator is applied as follows:

$$V_{.j} = {}_{y.j}\,''E_{vj} \qquad (4)$$

where:

V_j = the State estimate of monthly gas volumes in consumer sector *j*,

y_j = the sum within State of reported monthly gas volumes in consumer sector *j*.

Computation of Natural Gas Prices. The natural gas volumes that are included in the computation of prices represent only those volumes associated with natural gas sales.

The price of natural gas for a State within a sector is calculated as follows:

$$P_j = \frac{R_j}{V'_j}$$

where:

P_j = the average price for gas sales within the State in consumer sector j,

R_j = the reported revenue from natural gas sales within the State in consumer sector j,

V_j = the reported volume of natural gas sales within the State in consumer sector j.

All average prices are weighted by their corresponding sales volume estimates when national average prices are computed.

The monthly average prices of natural gas are based on sales data only. Volumes of gas delivered for the account of others to these consumer sectors are not included in the State or national average prices.

Table 25 shows the percent of the total State volume that represents volumes from natural gas sales to the commercial and industrial sectors. This table may be helpful in evaluating commercial and industrial price data. Virtually all natural gas deliveries to the residential sector represent onsystem sales volumes only.

See the section on consumer price calculations in this Appendix for further price information.

Estimation for Nonrespondents. A volume for each consumer category is imputed for companies that fail to respond. The imputation is based on the previous month's value reported by the non-responding company and the change from the previous month to the current month in volumes reported by other companies in the State. The imputed volumes are included in the State totals. To estimate prices for non-respondents, the unit price (dollars per thousand cubic feet) reported by the company in the previous month is used.

The formula for imputing volumes of gas sales for nonrespondents was:

$$F_t = F_t - 1'' \frac{y_{.jt}}{y_{.jt-1}} \qquad (5)$$

where:

F_t = imputed gas volume for current month t,

F_{t-1} = gas volume for the company for the previous month,

$y_{.jt}$ = gas volume reported by companies in the State stratum for report month t,

$y_{.j\,t-1}$ = gas volume in the previous month for companies in the State stratum that reported in month t.

Final Revisions

Adjusting Monthly Data to Annual Data. After the annual data reported on the Form EIA-176 have been submitted, edited, and prepared for publication in the *Natural Gas Annual*, revisions are made to monthly data. The revisions are made to the volumes and prices of natural gas delivered to consumers that have appeared in the *Natural Gas Monthly* to match them to the annual values appearing in the *Natural Gas Annual*. The revised monthly estimates allocate the difference between the sum of monthly estimates and the annual reports according to the distribution of the estimated values across the months.

Before the final revisions are made, changes or additions to submitted data received after publication of the monthly estimate and not sufficiently large to require a revision to be published in the *Natural Gas Monthly*, are used to derive an updated estimate of monthly consumption and revenues for each State's residential, commercial, or industrial natural gas consumption.

For each State, two numbers are revised, the estimated consumption and the estimated price per thousand cubic feet.

The formula for revising the estimated consumption is:

$$V^*_{jm} = V_{jm} + \left[\equiv (V_{ja} - V'_{jm})\left(\frac{V_{jm}}{V'_{jm}}\right)\right]\Downarrow \qquad (6)$$

where:

V^*_{jm} = the final volume estimate for month m in consumer sector j,

V_{jm} = the estimated volume for month m in consumer sector j,

V_{ja} = the volume for the year reported on Form EIA-176,

V'_{jm} = The annual sum of estimated monthly volumes.

The price is calculated as described above in the Estimation Procedures section, using the final revised consumption estimate and a revised revenue estimate.

The formula for revising the estimated revenue is:

$$R^*_{jm} = R_{jm} + \left[\equiv (R_{ja} - R'_{jm})\left(\frac{R_{jm}}{R'_{jm}}\right)\right]\Downarrow \qquad (7)$$

where:

R^*_{jm} = the final revenue estimate for month m in consumer sector j,

R_{jm} = the estimated revenue for month m in consumer sector j,

R_{ja} = the revenue for the year reported on Form EIA-176,

R'_{jm} = The annual sum of estimated monthly revenues. Revision of Volumes and Prices for Deliveries to Electric Utilities. Revisions to monthly electric utilities data are published throughout the year as they become available.

Reliability of Monthly Data

The monthly data published in this report are subject to two sources of error - nonsampling error and sampling error. Nonsampling errors occur in the collection and processing of the data. See the discussion of the Form EIA-857 in Appendix B for a description of nonsampling errors for monthly data.

Sampling error may be defined as the difference between the results obtained from a sample and the results that a complete enumeration would provide. The standard error statistic is a measurement of sampling error.

Standard Errors. A standard error of an estimate is a statistical measure that indicates how the estimate from the sample compares to the result from a complete enumeration. Standard errors are calculated based on statistical theory that refers to all possible samples of the same size and design.

The standard errors for monthly natural gas volume estimates by State are given in Table C1. Ninety-five percent of the time, the volume that would have been obtained from a complete enumeration will lie in the range between the estimated volume minus two

standard errors and the estimated volume plus two standard errors.

The standard error of the natural gas volume estimate is the square root of the variance of the estimate. The formula for calculating the variance of the volume estimate is:

$$V(\hat{Y}) = \sum_{h=1}^{H} \left[N_h^2 \frac{(1 - \frac{n_h}{N_h})}{n_h(n_h - 1)} \left(\sum_{i=1} (y_i - Tx_i)^2 \right) \right] \equiv \Downarrow \quad (8)$$

where:

H = the total number of strata

N_h= the total number of companies in stratum h

n_h= the sample size in stratum h

y_i= the reported monthly volume for company i

x_i= the reported annual volume for company i

T = the ratio of the sum of the reported monthly volumes for sample companies to the sum of the reported annual volumes for the sample companies.

Table C-1. Standard Error for Natural Gas Deliveries and Price to Consumers by State, February 1999

State	Volume Million Cubic Feet				Price Dollars per Thousand Cubic Feet		
	Residential	Commercial	Industrial	Total	Residential	Commercial	Industrial
Alabama	6,364	3,007	17,325	27,246	8.29	6.93	3.34
Alaska	2,223	2,894	5,521	13,158	3.53	2.38	1.18
Arizona	5,368	3,569	2,291	13,011	8.17	6.18	3.42
Arkansas	5,259	3,503	11,668	21,807	6.94	5.27	3.48
California	77,987	31,671	65,298	194,473	6.54	6.28	NA
Colorado	15,399	8,906	7,170	32,456	4.75	4.12	2.32
Connecticut	6,082	6,038	2,957	15,078	10.18	7.03	4.39
Delaware	1,469	944	1,878	5,203	8.10	6.59	3.93
District of Columbia	2,309	2,549	0	4,857	8.25	7.06	—
Florida	1,555	3,797	10,403	28,874	11.10	6.38	3.93
Georgia	13,082	5,786	11,713	30,600	2.38	2.35	2.83
Hawaii	48	191	0	238	18.34	12.49	—
Idaho	2,633	1,734	3,081	7,448	5.13	4.59	3.23
Illinois	61,438	26,221	29,448	118,464	4.62	4.48	3.71
Indiana	NA	NA	NA	NA	NA	NA	NA
Iowa	10,656	6,162	9,611	26,622	5.07	4.30	3.52
Kansas	NA	NA	NA	NA	NA	NA	NA
Kentucky	8,779	4,940	8,168	21,978	5.27	4.92	3.34
Louisiana	5,999	2,692	74,099	100,272	5.86	5.22	1.95
Maine	133	341	104	578	7.34	6.79	6.05
Maryland	NA	NA	NA	NA	NA	NA	NA
Massachusetts	NA	NA	NA	NA	NA	NA	NA
Michigan	52,119	25,441	26,741	107,362	4.76	4.68	3.66
Minnesota	17,096	12,605	11,213	41,064	5.06	4.25	2.81
Mississippi	4,022	2,934	6,900	18,533	5.41	4.23	3.11
Missouri	18,523	9,713	NA	NA	5.70	5.43	NA
Montana	2,519	1,550	1,614	5,688	4.93	4.91	4.78
Nebraska	5,949	4,246	2,695	12,934	4.38	4.00	3.12
Nevada	4,332	2,486	2,674	13,191	6.75	5.92	4.50
New Hampshire	1,036	1,070	484	2,590	7.60	7.15	6.73
New Jersey	NA	NA	NA	NA	NA	NA	NA
New Mexico	4,896	4,322	4,870	16,409	4.25	3.40	2.64
New York	NA	NA	NA	NA	NA	NA	NA
North Carolina	7,495	6,309	8,025	21,832	8.40	6.44	3.60
North Dakota	1,565	1,558	2,844	5,967	4.67	4.04	2.53
Ohio	49,194	26,480	31,901	107,908	5.69	5.33	5.13
Oklahoma	9,465	5,832	14,203	37,020	5.48	5.23	3.50
Oregon	5,445	3,880	8,854	19,114	6.79	5.56	3.91
Pennsylvania	34,404	20,975	23,816	79,300	7.86	7.25	4.45
Rhode Island	2,662	1,686	1,728	6,077	8.90	7.75	4.77
South Carolina	3,591	2,232	8,284	14,128	9.14	6.94	3.15
South Dakota	1,719	1,343	463	3,646	5.09	4.16	3.12
Tennessee	8,917	6,648	12,593	28,158	6.05	5.72	3.54
Texas	23,882	18,878	157,475	255,885	5.20	4.28	2.02
Utah	7,725	4,198	3,350	15,610	5.33	4.14	3.16
Vermont	387	321	312	1,023	6.29	5.23	2.75
Virginia	11,220	8,062	7,364	28,564	7.98	6.04	3.88
Washington	NA	NA	NA	NA	NA	NA	NA
West Virginia	4,936	3,286	3,705	11,950	6.96	6.23	2.82
Wisconsin	16,833	11,927	14,720	44,128	6.28	4.90	3.82
Wyoming	1,674	1,124	NA	NA	5.03	4.47	NA
Total	**672,844**	**393,808**	**719,991**	**1,938,601**	**6.24**	**5.18**	**2.99**

NA Not Available.
— Not Applicable.

Source: Energy Information Administration, Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Appendix D

Natural Gas Reports and Feature Articles

Reports Dealing Principally with Natural Gas and/or Natural Gas Liquids

Natural Gas Annual 1995, DOE/EIA-0131(95), November 1996.

Natural Gas Annual 1993 Supplement: Company Profiles, DOE/EIA-0131(93/S), February 1995.

Natural Gas 1996 Issues and Trends, DOE 0560(96), December 1996.

Other Reports Covering Natural Gas, Natural Gas Liquids, and Other Energy Sources

Monthly Energy Review, DOE/EIA-0035. Published monthly. Provides national aggregate data for natural gas, natural gas liquids, and other energy sources.

Short-Term Energy Outlook, DOE/EIA-0202. Published quarterly. Provides forecasts for next six quarters for natural gas and other energy sources.

Natural Gas 1995: Issues and Trends, DOE/EIA-0560(95), November 1995.

U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves - 1995 Annual Report, DOE/EIA-0216(95)/Advance Summary, October 1996.

Annual Energy Review 1995, DOE/ EIA-0384(95), July 1996. Published annually.

Annual Report to Congress 1995 DOE/ EIA-01733(95), July 1996. Published annually.

Annual Energy Outlook 1996, DOE/ EIA-0383(96), January 1996. Published annually.

Selected One-Time Natural Gas and Related Reports

The Value of Underground Storage in Today's Natural Gas Industry, DOE/EIA-0591, March 1995.

Natural Gas Productive Capacity for the Lower 48 States, 1980 through 1995, DOE/EIA-0542(95), July 1994.

Largest U.S. Oil and Gas Fields, DOE/EIA-TR-0567, August 1993.

Energy Policy Act Transportation Rate Study, DOE/EIA-0571, October 1993.

Energy Policy Act Transportation Study: Interim Report of Natural Gas Flows and Rates, DOE/EIA-0602, October 1995.

Selected and Recurring Natural Gas and Related Data Reference Reports

Directory of Energy Data Collection Forms, DOE/EIA-0249(95), January 1996.

Oil and Gas Field Code Master List, 1995, EIA-0370(95), December 1996.

Feature Articles

June 1996

Natural Gas Industry Restructuring and Data Collection

(Discusses how restructuring of the natural gas industry has impacted the natural gas data collection efforts.)

July 1996

Revisions to Monthly Natural Gas Data

(Discusses the revision errors for natural gas data.)

November 1996

U.S. Natural Gas Imports and Exports - 1995

(Contains final 1995 data on all U.S. imports and exports of natural gas.)

December 1996

Crosswell Seismology — A View from Aside

(Discusses crosswell seismology and its geologic and economic implications for the domestic oil and gas industry.)

May 1997

Restructuring Energy Industries: Lessons from Natural Gas

(Compares and contrasts the natural gas and electric power industries.)

July 1997

Intricate Puzzle of Oil and Gas "Reserves Growth"

(Discusses the factors that affect ultimate recovery estimates of a field or reservoir.)

Revisions to Monthly Natural Gas Data

(Discusses the revision errors for natural gas data.)

August 1997

Natural gas Residential Pricing Developments During the 1996-97 Winter

(Discusses key factors that affect pricing patterns, highlights the effects of weather, utilization patterns of natural gas storage, and pricing mechanisms used in natural gas markets.)

December 1997

Recent Trends in Natural Gas Spot Prices

(Focuses primarily on conditions and developments in the East Consuming Region and their connection to prices at the Henry Hub in the Producing Region.)

March 1998

EIA Corrects Errors in EIA's Drilling Activity Estimates Series

(Discusses and corrects errors in EIA's monthly and annual estimates of oil and gas drilling activity.)

July 1998

Revisions to Monthly Natural Gas Data

(Discusses the revision errors for natural gas data.)

April 1999

Natural Gas 1998: Issues and Trends - Executive Summary

(Examines the current natural marketplace from a series of vantage points.)

Special Focuses

January 1997

Natural Gas Productive Capacity

(Analyzes monthly natural gas wellhead productive capacity in the lower 48 States from 1985 and 1996 and project this capacity for 1996 and 1997.)

Outlook for Natural Gas Through 2015

(Presents an outlook for natural gas through 2015.)

August 1997

Worldwide Natural Gas Supply and Demand And the Outlook For Global LNG Trade

(Focuses on natural gas into the next century with emphasis on world natural gas supply and demand to 2015.)

September 1997

Advance Summary: U.S. Crude Oil, Natural Gas, and Natural gas Liquids Reserves, 1996 Annual Report - Advance Summary

(Focuses on proved reserves of domestic crude oil, natural gas, and natural gas liquids.)

May 1998

Deliverability on the Interstate Natural Gas Pipeline System

(Examines the capability of the interstate pipeline network to move gas to various U.S. markets and discusses changes occurring since 1990.)

Special Reports

March 1997

Natural Gas Analysis and Geographic Information Systems

(Explores how geographic information system techniques and methodologies are being used by the Energy Information Administration.)

April 1997

Natural Gas Pipeline and System Expansions

(Examines recent expansions to the North American natural gas)

Natural Gas 1996: Highlights

(Reviews data for 1996 based on Energy Information Administration surveys.)pipeline network.)

July 1997

Revisions to Monthly Natural Gas Data

(Discusses the revision errors for natural gas data.)

August 1997

U.S. Natural gas Imports and Exports - 1996

(Contains final 1996 data on all U.S. imports and exports of natural gas.)

September 1997

U.S. Underground Storage of Natural Gas in 1997: Existing and Proposed

(Examines recent and proposed expansions of underground natural gas storage capacity and deliverability in the United States as of September 1, 1997.)

October 1997

Comparison of Natural Gas Storage Estimates from the EIA and AGA

(Compares EIA and AGA estimates from January 1994 through July 1997.)

April 1998

Natural Gas 1997: A Preliminary Summary

(Reviews data for 1997 based on Energy Information Administration surveys.)

July l998

Revisions to Monthly Natural Gas Data

(Discusses the revision errors for natural gas data.)

August 1998

U.S Natural Gas Imports and Exports - 1997

(Contains final 1997 data on all U.S. imports and exports of natural gas.)

April 1999

Natural Gas 1998: A Preliminary Summary

(Reviews data for 1998 based on Energy Information Administration surveys.)

Appendix E

Technical Contacts

Section	Tables		Principal Data Sources	Technical Contact
Summary Statistics: Natural Gas Production	1,2,3	Monthly: Annual:	EIA-895, "Monthly Quantity of Natural Gas Report"	Sharon Belcher (202)586-6119
		Monthly:	Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers"	Roy Kass (202)586-4790
Extraction Loss	1	Monthly: Annual:	EIA computations Form EIA-816, "Monthly Natural Gas Liquids Report" and Form EIA-64A, "Annual Report of the Origin of Natural Gas Liquids Production"	Margo Natof (202)586-6303
Supplemental Gaseous Fuels	2	Monthly: Annual:	EIA computations Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition"	Margo Natof (202)586-6303
Imports and Exports	2	Monthly: Annual:	EIA computations Office of Fossil Energy, U.S. Department of Energy, "Natural Gas Import and Exports"	Linda Cook (202)586-6306
Price: City Gate, Residential, Commercial, and Industrial	4	Monthly:	Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers"	Roy Kass (202)586-4790
Wellhead	4	Monthly: Annual:	EIA computations Form EIA-895, "Monthly Quantity and Value of Natural Gas Report"	Sylvia Norris (202)586-6106
Electric Utility	4	Monthly:	Form FPC-423, "Cost and Quality of Fuels for Electric Power Plants"	Roy Kass (202)586-4790
Summary of Natural Gas Imports and Exports	5,6	Monthly:	Quarterly Natural Gas Import and Export Sales and Price Report	Linda Cook (202)586-6306
Producer Related Activities: Natural Gas Production	7,8	Monthly:	EIA-895, "Monthly Quantity of Natural Gas Report"	Sharon Belcher (202)586-6119
Underground Storage:	9,10,11, 12,13,14	Monthly:	Forms FERC-8 and EIA-191, "Underground Gas Storage Report"	Carol Jones (202) 586-6168
Distribution and Consumption: Deliveries to: Residential, Commercial, Industrial, Electric Utility, All Consumers	 15 16 17 18 19	 Monthly:	 Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers" Form FERC-423, "Cost and Quality of Fuels for Electric Power Plants"	 Roy Kass (202)586-4790
Average Price to: City Gate, Residential, Commercial, Industrial, Electric Utility Onsystem Sales	 20 21 22 23 24 25	 Monthly: Monthly:	 Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers" Form FERC-423, "Cost and Quality of Fuels for Electric Power Plants" Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers"	 Roy Kass (202)586-4790 Roy Kass (202)586-4790
Heating Degree Days	26	Seasonal:	National Oceanic and Atmospheric Administration	Patricia Wells (202)586-6077
Highlights				Mary Carlson (202)586-4749

Appendix F

Natural Gas Electronic Products

In addition to printed publications, the Energy Information Administration distributes information concerning the natural gas industry in a variety of electronic formats through several media. Two main types of products are available electronically: *viewable documents* that may be read or printed; and *post-processable files* that may be directly used as input to a computer application without additional keying and checking of data.

Viewable documents represent complete or selected sections of publications including text, tables and graphs. They may be as specific as single tables or as general as an entire publication. Post-processable documents on the other hand are either macro-level representations of information in published tables or micro-level respondent information representing responses on a specific nonconfidential survey.

The media used to distribute these electronic publications include: (1) The Energy Information Administration's Internet site (http://www.eia.doe.gov or ftp://ftp.eia.doe.gov); (2) Dial-in access through the Energy Information Administration's EPUB electronic bulletin board or through the Economic Bulletin Board of the Department of Commerce and the COGIS system; (3) The Energy Information Administration's quarterly CD-ROM (InfoDisk); (4) The Energy Information Administration's Fax on Demand System; and (5) diskettes.

	Internet	Dial-In	Infodisk	E-Mail	Diskette
ANNUAL PUBLICATIONS					
Natural Gas Annual, 1997 Provides information on supply and disposition of natural gas in the United States. Information is provided nationally, regionally, and by State for 1997.	V P		V P		P
Historical Natural Gas Annual, 1930 through 1997 Contains historical information about supply and disposition of natural gas at the national, regional, and State level, as well as prices at selected points in the flow of gas from wellhead to burnertip.	P		P		P
Natural Gas 1996: Issues and Trends Examines how industry restructuring continues to expand choices, and challenges, for industry, participants, and natural gas customers.	V		V		
Natural Gas 1995: Issues and Trends Addresses current issues affecting the natural gas industry and markets, and analyzes trends in the most recent natural gas data.	V		V		
Natural Gas 1994: Issues and Trends Provides an overview of the natural gas industry in 1993 and early 1994, focusing on the overall ability to deliver gas under the new regulatory mandates of the Federal Energy Regulatory Commission's Order 636.	V		V		
U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves Annual Report, 1996 1996 national and State estimates of reserves, reserve changes, and production, plus industry highlights.	V		V		

V = Viewable P = Post-Processable E = Automatic E-Mail Updates

	Internet	Dial-In	Infodisk	E-Mail	Diskette
Natural Gas Productive Capacity for the Lower 48 States 1986-1998 Analysis of monthly natural gas wellhead productive capacity.	V		V		
MONTHLY PUBLICATIONS					
Natural Gas Monthly, from the previous 12 months Entire Publication in viewable format.	V		V		
OTHER PUBLICATIONS					
Natural Gas Weekly Market Update Analysis of current price, supply and storage data along with a two week snapshot of the weather in four distinct metropolitan areas.	V				
Deliverability on the Interstate Natural Pipeline System This publication chronicles and analyzes pipeline growth from the perspective of the natural gas shipper and pipeline transporter.	V				
Natural Gas 1997: Preliminary Highlights This Special Focus, which was featured in the April 1998 issue of the *Natural Gas Monthly*, presents events that affected the natural gas industry during 1997.	V	P			
Energy Policy Act Transportation Study: Interim Report on Natural Gas Flow and Rates (EPACT) Analysis of natural gas transportation rates and distribution patterns for the period 1988 through 1994.	V		V		
Oil Production Capacity Extension Cost for the Persian Gulf Quantifies the cost of expanding oil production capacity for the Persian Gulf based on geologic plays and fields rather than country-level economics. Development costs and volumes are estimated for the next 15 years.	V		V		
Costs and Indices for Domestic Oil and Gas Fields Equipment and Production Operations 1993-1996 Cost of equipment and operation of oil and gas wells in the lower 48 States.	V		V		
Drilling Sideways- A Review of Horizontal Well Technology and the Domestic Application Salient aspects of current and near-future horizontal drilling and completion technology.	V		V		
International Oil and Gas Exploration and Development Compilation of country-level data and assessment of regional trends relating to upstream aspects of global oil and gas supply.	V		V		
Oil and Gas Field Code Master List Comprehensive listing of U.S. oil and gas field names as of October 1997.	V		V		
Oil and Gas Resources of the Fergana Basin (Uzbekistan, Tadzhikistan, and Kyrgysztan) Reservoir level assessments of oil and gas ultimate recovery in the former Soviet Union area.	V		V		

V = Viewable P = Post-Processable E = Automatic E-Mail Updates

	Internet	Dial-In	InfoDisk	E-Mail	Diskette
The Value of Underground Storage in Today's Natural Gas Industry. Explores the significant and changing role of storage in the industry.	V		V		
U.S. Oil and Gas Development in the Early 1900's Analyses of the growing prominence of smaller energy companies in U.S. oil and gas production	V		V		
ANNUAL DATA					
Natural Gas Supply and Disposition, by State 1997	V P	V P			
Natural Gas Summary, United States by Year 1990-1997	V P	V P			
Natural Gas Annual 1997 data Self-extracting file containing data (in comma-delimited format) that appear in the tables in the 1997 *Natural Gas Annual*.	P		P		P
Historical Natural Gas Annual 1997 data Self-extracting file containing historical information (in comma-delimited format) found in the tables in Volume 2 of the 1997 *Natural Gas Annual*. Annual historical data at the national level are presented for 1930-1997. Annual information by State and region is presented for 1967-1997.	P		P		P
1997 Data reported on Form EIA-176 A self-extracting compressed file containing data reported on Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," for 1997.	P				P
1996 Data reported on Form EIA-176 A self-extracting compressed file containing data reported on Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," for 1996.	P				P
Data archive of historical reserves estimates for U.S. Crude Oil, Natural Gas, and Natural Gas Liquids National, State, and State subregion data published in the reserves balance tables of *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves* from 1977 forward.	P				P
MONTHLY DATA					
Natural Gas Production, United States by Month 1989-forward	P	P			
Natural Gas Supply and Disposition 1989-forward	P	P		E	
Natural Gas Imports and Exports 1989-forward	P	P			
Natural Gas Underground Storage: United States Total by Month 1989-forward	P	P		E	
Natural Gas Prices: United States Total by Month 1989-forward	P	P		E	
Natural Gas Consumption by Sector: United States Total by Month 1989-forward	P	P		E	
SELF-EXTRACTING COMPRESSED DATA FILE ARCHIVES					
Natural Gas Consumption and Prices, for most recent 2-3 years	P	P			
Natural Gas Consumption and Prices, for 1984-1995	P	P			

V = Viewable P = Post-Processable E = Automatic E-Mail Updates

Glossary

Balancing Item: Represents the difference between the sum of the components of natural gas supply and the sum of the components of natural gas disposition. These differences may be due to quantities lost or to the effects of data reporting problems. Reporting problems include differences due to the net result of conversions of flow data metered at varying temperature and pressure bases and converted to a standard temperature and pressure base; the effect of variations in company accounting and billing practices; differences between billing cycle and calendar period time frames; and imbalances resulting from the merger of data reporting systems which vary in scope, format, definitions, and type of respondents.

Base (Cushion) Gas: The volume of gas needed as a permanent inventory to maintain adequate underground storage reservoir pressures and deliverability rates throughout the withdrawal season. All native gas is included in the base gas volume.

British Thermal Unit (Btu): The heat required to raise the termperature of one pound of water by one degree Fahrenheit at or near 39.2 degrees Fahrenheit.

City-gate: A point or measuring station at which a gas distribution company receives gas from a pipeline company or transmission system.

Commercial Consumption: Gas used by nonmanufacturing organizations such as hotels, restaurants, retail stores, laundries, and other service enterprises, and gas used by local, State, and Federal agencies engaged in nonmanufacturing activities.

Depletion: The loss in service value incurred in connection with the exhaustion of the natural gas reserves in the course of service.

Depreciation: The loss in service value not restored by current maintenance, incurred in connection with the consumption or respective retirement of a gas plant in the course of service from causes that are known to be in current operation and against which the utility is not protected by insurance; for example, wear and tear, decay, obsolescence, changes in demand and requirements of public authorities, and the exhaustion of natural resources.

Dry Natural Gas Production: Marketed production less extraction loss.

Electric Utility Consumption: Gas used as fuel in electric utility plants.

Exports: Natural gas deliveries out of the continental United States and Alaska to foreign countries.

Extraction Loss: The reduction in volume of natural gas resulting from the removal of natural gas liquid constituents at natural gas processing plants.

Flared: The volume of gas burned in flares on the base site or at gas processing plants.

Gross Withdrawals: Full well stream volume, including all natural gas plant liquid and nonhydrocarbon gases, but excluding lease condensate. Also includes amounts delivered as royalty payments or consumed in field operations.

Imports: Natural gas received in the Continental United States (including Alaska) from a foreign country.

Independent: Producers: Any person who is engaged in the production or gathering of natural gas and who sells natural gas in interstate commerce for resale but who is not engaged in the transportation of natural gas (other than gathering) by pipeline in interstate commerce.

Industrial Consumption: Natural gas used by manufacturing and mining establishments for heat, power, and chemical feedstock.

Interstate Companies: Natural gas pipeline companies subject to FERC jurisdiction.

Intransit Deliveries: Redeliveries to a foreign country of foreign gas received for transportation across U.S. territory and deliveries of U.S. gas to a foreign country for transportation across its territory and redelivery to the United States.

Intransit Receipts: Receipts of foreign gas for transportation across U.S. territory and redelivery to a foreign country and redeliveries to the United States of U.S. gas transported across foreign territory.

Intrastate Companies: Companies not subject to FERC jurisdiction.

Lease and Plant Fuel: Natural gas used in well, field, lease operations and as fuel in natural gas processing plants.

Liquefied Natural Gas (LNG): Natural gas that has been liquefied by reducing its temperature to minus 260 degrees Fahrenheit at atmospheric pressure.

Marketed Production: Gross withdrawals less gas used for repressuring, quantities vented and flared, and nonhydrocarbon gases removed in treating or processing operations. Includes all quantities of gas used in field and processing operations. See Explanatory Note 1 for discussion of coverage of data concerning nonhydrocarbon gases removed.

Native Gas: Gas in place at the time that a reservoir was converted to use as an underground storage reservoir as in contrast to injected gas volumes.

Natural Gas: A mixture of hydrocarbon compounds and small quantities of various nonhydrocarbons existing in the gaseous phase or solution with oi1 in natural underground reservoirs at reservoir conditions.

Nonhydrocarbon Gases: Typical nonhydrocarbon gases that may be present in reservoir natural gas are carbon dioxide, helium, hydrogen sulfide, and nitrogen.

Onsystem Sales: Sales to customers where the delivery point is a point on, or directly interconnected with, a transportation, storage, and/or distribution system operated by the reporting company.

Pipeline Fuel: Gas consumed in the operation of pipelines, primarily in compressors.

Repressuring: The injection of gas into oil or gas formations to effect greater ultimate recovery.

Residential Consumption: Gas used in private dwellings, including apartments, for heating, cooking, water heating, and other household uses.

Salt Cavern Storage Field: A storage facility that is a cavern hollowed out in either a salt "bed" or "dome" formation.

Storage Additions: The volume of gas injected or otherwise added to underground natural gas or liquefied natural gas storage during the applicable reporting period.

Storage Withdrawals: Total volume of gas withdrawn from underground storage or liquefied natural gas storage during the applicable reporting period.

Supplemental Gaseous Fuels Supplies: Synthetic natural gas, propane-air, refinery gas, biomass gas, air injected for stabilization of heating content, and manufactured gas commingled and distributed with natural gas.

Synthetic Natural Gas (SNG): A manufactured product chemically similar in most respects to natural gas, that results from the conversion or reforming of petroleum hydrocarbons and may easily be substituted for or interchanged with pipeline quality natural gas.

Therm: One-hundred thousand British thermal units.

Underground Gas Storage Reservoir Capacity: Interstate company reservoir capacities are those certificated by FERC. Independent producer and intrastate company reservoir capacities are reported as developed capacity.

Vented Gas: Gas released into the air on the base site or at processing plants.

Wellhead Price: Represents the wellhead sales price, including charges for natural gas plant liquids subsequently removed from the gas, gathering and compression charges, and State production, severance, and/or similar charges.

Working (Top Storage) Gas: The volume of gas in an underground storage reservoir above the designed level of the base. It may or may not be completely withdrawn during any particular withdrawal season. Conditions permitting, the total working capacity could be used more than once during any season.